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# AGRICULTURAL EXPERIMENT STATIONS FOR THE CALENDAR YEARS 1941 AND 1942

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  254. Management of farm fish ponds. H. S. Swingle and E. V. Smith. 23 pp. Apr. 1942.

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   W. T. McGeorge, E. O. Foster, A. M. Kalaf, and H. von Colbitz.
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- 174. Efficiency in the use of farm machinery in Arizona. N. O. Thompson. Pp. 255-278. Sept. 1941.
- Agricultural land ownership and operating tenures in Casa Grande Valley. P. Greisinger and G. W. Barr. Pp. 279-292. Nov. 1941.

<sup>&</sup>lt;sup>1</sup>This publication is a continuation of Department Bulletin 1199, the three supplements thereto, and Miscellaneous Publications 65, 128, 181, 232, 294, 362, and 459.

The publications listed in this bulletin can be obtained only from the stations issuing them.

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176. Volume and characteristics of migration to Arizona, 1930-39.
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183. The cost of production of eggs and pullets in southern Arizona. H. Embleton. 45 pp. Apr.

1942. 184. Poultry feeding and confinement rearing experiments. H. B. Hinds. 20 pp. Apr. 1942. 185. Swine raising in Arizona. E. B. Stanley, C. L. Bell, and J. T. Rigden. 27 pp. Sept.

186. Wanted—man power for Arizona farms. Seasonal and year-round farm labor requirements, Arizona, 1935-42. E. D. Tetreau. 36 pp. Nov. 1942.

TECHNICAL BULLETINS

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 Physiological studies of yield, quality, and maturity of Marsh grapefruit in Arizona. W. E. Martin. 48 pp. Nov. 1942.
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# ARKANSAS AGRICULTURAL EXPERIMENT STATION, FAYETTEVILLE

#### BULLETINS

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410. Relation of fertilizer balance to potash hunger and the Fusarium wilt of cotton. V. H. Young and W. H. Tharp. 24 pp. June 1941.
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411. Crossbreeding for broiler production. W. R. Horlacher, R. M. Smith, and W. H. Wiley. 24 pp. June 1941.
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417. Serving Arkansas agriculture: Fifty-third annual report for the fiscal year ending June 30, 1941. W. R. Horlacher. 47 pp. June 1942. 417. Serving Arkansas agriculture: Firty-third annual report for the fiscal year ending June 30, 1941. W. R. Horlacher. 47 pp June 1942.
 418. Winter injury as related to fall and winter growth and crown-rust infection in oat varieties and their hybrids. H. R. Rosen, L. M. Weetman and C. K. McClelland. 17 pp. June

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419. Livestock and forestry enterprises on farms in the Ozark region. W. T. Wilson and J. W. Reid. 50 pp. June 1942.

Reid. 50 pp. June 1942.
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# CALIFORNIA AGRICULTURAL EXPERIMENT STATION, BERKELEY

#### BULLETINS

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652. Commercial production of brandies. M. A. Joslyn and M. A. Amerine. 80 pp. Sept. 1941.

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 675. Breeding chickens for meat production. V. S. Asmundson and I. M. Lerner. 45 pp. Nov. 1942.

#### HILGARDIA

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Vol. 13, No. 11. Cysteine and related compounds for differentiating members of the genus Salmonella. W. R. Hinshaw; Microanatomy of the duodenum of the turkey. L. E. Rosenberg. Pp. 583-654. Apr. 1941.
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Species of Stigmina and Stigmella occurring on Platanus. D. J. Smith and C. O. Smith. Pp. 161-231. Nov. 1941.

Vol. 14, No. 5. Relation between auction prices and supplies of California fresh Bartlett pears. S. Hoos and S. W. Shear. Pp. 233-319. Jan. 1942.

Vol. 14, No. 6. The relation of maturity of the grapes to the yield, composition, and quality of raisins. H. E. Jacob; The effect of pretreatment and subsequent drying on the activity of grape oxidase. A. A. Hussein, E. M. Mrak, and W. V. Cruess; Some factors affecting the burning of sulfurs used in sulfuring fruits. C. S. Bisson, H. W. Allinger, and H. A. Young. Pp. 321-372. Feb. 1942.

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Vol. 14, No. 10. The susceptibility of perennial delphiniums to six viruses. H. H. P. Severin; Leaf variegations of perennial delphiniums. H. H. P. Severin; Viroses of annual larkspurs. H. H. P. Severin. Pp. 549-594. Sept. 1942.

# COLORADO AGRICULTURAL EXPERIMENT STATION. FORT COLLINS

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#### TECHNICAL BULLETINS

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# CONNECTICUT (STATE) AGRICULTURAL EXPERIMENT STATION, NEW HAVEN

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  Connecticut State Entomologist, fortieth report, 1940. R. B. Friend. Pp. 289-384. July
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- 446. Annual report for the year ending October 31, 1940. W. L. Slate. Pp. 389-445. July

- The forty-fifth report on food products and the thirty-third report on drug products, 1940.
   E. M. Bailey. Pp. 447-481. Sept. 1941.
   A portable charcoal kiln, using the chimney principle. A. R. Olson and H. W. Hicock. Pp. 483-513. Oct. 1941.
   Forest lysimeter studies under hardwoods. H. A. Lunt. Pp. 515-572. Sept. 1941.
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   Commercial fertilizers report for 1941. E. M. Bailey. Pp. 37-96. Nov. 1941.
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- 455. Meeting the spray material shortage. N. Turner and J. G. Horsfall. Pp. 169-179. Mar. 1942.
- Causes, effects and control of defoliation on tomatoes. J. G. Horsfall and J. W. Heuberger. Pp. 183-223. Mar. 1942.

- Tobacco substation at Windsor, report for 1941. P. J. Anderson and T. R. Swanback.
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   Soil and crop interrelations of various nitrogenous fertilizers: Windsor lysimeter series B.
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   Commercial feeding stuffs, report of inspection, 1941. E. M. Bailey. Pp. 329-422. May
- 460. The forty-sixth report on food products and the thirty-fourth report on drug products, 1941.
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- 465. Cytological and genetic studies of sterility in inbred and hybrid maize. F. J. Clark. Pp. 704-726. Sept. 1942.
- 466. Drainage water losses from a sandy soil as affected by cropping and cover crops: Windsor lysimeter series C. M. F. Morgan, H. G. M. Jacobson, and S. B. LeCompte, Jr. Pp. 729-759. Oct. 1942.
- 467. Commercial fertilizers, report for 1942. E. M. Bailey. 52 pp. Nov. 1942.

# CONNECTICUT (STORRS) AGRICULTURAL EXPERIMENT STATION, STORRS

#### BULLETINS

- Pasture investigations (Ninth report): Ladino clover experiments, 1930 to 1940. B. A. Brown and R. I. Munsell. 42 pp. July 1941.
   The hatchability of chicken eggs as influenced by environment and heredity. W. Landauer. 124 pp. June 1941. Revision of 216.
   Efficiency of milk marketing in Connecticut. 1. Supply and price interrelationships for fluid milk markets. D. O. Hammerberg, L. W. Parker, and R. G. Bressler, Jr. 53 pp. Feb. 1942.

- Feb. 1942.
  238. Efficiency of milk marketing in Connecticut. 2. The transportation of milk. D. O. Hammerberg and W. G. Sullivan. 29 pp. Feb. 1942.
  239. Efficiency of milk marketing in Connecticut. 3. Economics of the assembly of milk. R. G. Bressler, Jr. and D. O. Hammerberg. 53 pp. Feb. 1942.
  240. Infectious bovine mastitis. 8. The control of Streptococcus agalactiae mastitis by a segregation program based on periodic laboratory tests. W. N. Plastridge, E. O. Anderson, and F. J. Weirether. 54 pp. Jan. 1942.
  241. Efficiency of the transportation of eggs to Connecticut cooperative associations. W. J. Hansen and R. G. Bressler, Jr. 35 pp. Aug. 1942.
  242. The effects of cutting systems on alfalfa. B. A. Brown and R. I. Munsell. 23 pp. Nov. 1942.
- 1942.
- 243. Efficiency of milk marketing in Connecticut. 4. Retail distribution of milk by producers.
  D. O. Hammerberg, I. F. Fellows, and R. H. Farr. 58 pp. Dec. 1942.

# DELAWARE AGRICULTURAL EXPERIMENT STATION, NEWARK

- An economic study of land utilization in New Castle County, Delaware. R. O. Bausman. 74 pp. Feb. 1941.
   (Technical Bulletin 27.) The penetration and availability of metaphosphates in soils. G. M. Gilligan. 16 pp. Apr. 1941.

- 230. Delaware farm production and prices: A compilation of available statistics. C. E. Burkhead and R. O. Bausman. 90 pp. May 1941.
  231. The improvement of a Holstein-Friesian herd through the use of sires with superior pedigrees. The first twenty years, 1920-1940. T. A. Baker and A. E. Tomhave. 23 pp.
- June 1941.
- 232. Intensity of fall and winter egg production of pullet progeny sired by cockerels sib-tested for intensity of production. A. E. Tomhave. 27 pp. June 1941.
  233. An economic study of land utilization in Sussex County, Delaware. R. O. Bausman. 66 pp. Oct. 1941.
- 234. (Technical Bulletin 28.) Fruit jellies XI: The role of pectin-7: Demethylation of pectin and its effect upon jellying properties. G. L. Baker and M. W. Goodwin. 48 pp. Oct. 1941.
- 235. Annual report of the director for the fiscal year ending June 30, 1941. G. L. Schuster. 41 pp. Dec. 1941.
- 236. Peach yellows and little peach. T. F. Manns. 50 pp. Apr. 1942.
- 237. An analysis of farm mortgage experience in Kent County, Delaware. M. M. Daugherty. 65 pp. May 1942.
- 238. Annual report of the director for the fiscal year ending June 30, 1942. G. L. Schuster. 35 pp. Nov. 1942.
- Milk price-feed price relationships in Delaware. M. M. Daugherty. 22 pp. Dec. 1942.
   (Technical Bulletin 29.) Physiological dropping of fruits. IV. Mechanical and plumcurculio injuries in relation to dropping of young fruits. L. R. Detjen, E. W. Greve, and W. H. Phillips. 32 pp. Dec. 1942.

# FLORIDA AGRICULTURAL EXPERIMENT STATION, GAINESVILLE

#### BULLETINS

- 354. The feeding value and nutritive properties of citrus by-products. II. Dried grapefruit pulp for milk production. P. T. D. Arnold, R. B. Becker, and W. M. Neal. 14 pp. Feb. 1941.
- 355. Corn varieties and hybrids and corn improvement. F. H. Hull, J. D. Warner, and W. A.

- Corn varieties and hybrids and corn improvement. F. H. Hull, J. D. Warner, and W. A. Carver. 50 pp. Feb. 1941.
   Distribution and concentration of copper in the newborn calf as influenced by the nutrition of the dam. L. L. Rusoff. 61 pp. Apr. 1941.
   The gladiolus thrips in Florida. J. W. Wilson; With notes on other thrips found on gladiolus. J. R. Watson. 24 pp. May 1941.
   Comparative feeding value of silages made from Napier grass, sorghum, and sugarcane. A. L. Shealy, W. G. Kirk, and R. M. Crown. 18 pp. May 1941.
   Distribution of "trace elements" in the newborn calf as influenced by the nutrition of the dam. L. L. Rusoff. 47 pp. June 1941.
   Cattle feeding in southern Florida. R. W. Kidder and W. G. Kirk. 23 pp. July 1941.
   Crotalaria for forage. I. Production of crotalaria for forage, G. E. Ritchey and R. McKee; II. Value of Crotolaria as feed. R. B. Becker, W. M. Neal, and P. T. D. Arnold; III. General discussion, summary and conclusions. 72 pp. Aug. 1941.
   Relation of maturity in Bliss Triumph potato seed stocks to effectiveness of ethylene chlorhydrin and other treatments. G. R. Townsend. 40 pp. Sept. 1941.
   Fusarium wilt of watermelons. I. Effect of soil temperature on the wilt disease and the growth of watermelon seedlings. M. N. Walker. 29 pp. Oct. 1941.
   Grisphead lettuce in Florida a preliminary report. J. R. Beckenbach, F. S. Jamison, R. W. Ruprecht, and F. S. Andrews. 19 pp. Dec. 1941.
   Spraying and dusting for the control of celery early blight in the Everglades. G. R. Townsend. 26 pp. Jan. 1942.
   Production credit in Florida citrus and vegetable areas. J. W. Reitz. 102 pp. Jan. 1942.
   Production credit in Florida citrus and vegetable areas. J. W. Reitz. 102 pp. Jan. 1942.
   Insects and other pests of Florida vegetables. J. R. Watson and A. N. Tissot. 118 pp. May 1942.
   Insects and other pests of Florida vegetables. J. R.

- May 1942.

  May 1942.

  371. Life history and taxonomy of the fungus Physalospora rhodina. R. K. Voorhees. 91 pp. May 1942.
- May 1942.

  372. Deficiency symptoms in growing pigs fed a peanut ration. W. G. Kirk and R. M. Crown. 52 pp. June 1942.

  373. Sugarcane silage, shocked sugarcane and carpet grass as roughages for wintering the beef herd. W. G. Kirk and R. M. Crown. 19 pp. July 1942.

  374. Field experiments in the use of sulfur to control lice, fleas, and mites of chickens. M. W. Emmel. 8 pp. Aug. 1942.

  375. Annual lespedeza for Florida pastures for northwest Florida. J. D. Warner; For peninsular Florida. R. E. Blaser. 22 pp. Sept. 1942.

  376. Tung tree (Aleurites fordi Hemsl.) foliage poisoning of cattle. D. A. Sanders, M. W. Emmel, L. E. Swanson. 8 pp. Sept. 1942.

  377. Factors affecting farming returns in Jackson County, Florida. M. E. Brunk. 36 pp. Oct. 1942.

  378. Water control in the peat and muck soils of the Florida Everglades. B, S. Clayton, J. R.

- 378. Water control in the peat and muck soils of the Florida Everglades. B. S. Clayton, J. R. Neller and R. V. Allison. 74 pp. Nov. 1942.
  379. Circulatory system of the cow's udder. R. B. Becker and P. T. D. Arnold. 18 pp. Nov.
- 1942.
- Methods of feeding grain to laying pullets. N. R. Mehrhof, E. F. Stanton, and D. F. Sowell. 27 pp. Dec. 1942.
   A preliminary report on iron deficiency of tung in Florida. R. D. Dickey. 20 pp. Dec.
- 1942.

# GEORGIA AGRICULTURAL EXPERIMENT STATION, EXPERIMENT

- Uptake of nutrients by the Perfection pimiento plant under field conditions and its relation to fertilizer practices in Georgia. H. L. Cochran and L. C. Olson. 16 pp. Feb. 1941.
   Culture and fertilizer studies with peanuts. U. R. Gore. 19 pp. Feb. 1941.
   Graphic summary of farm tenancy in Georgia. J. C. Elrod. 39 pp. Mar. 1941.
   Beef cattle feeding investigations. Z. A. Massey. 19 pp. May 1941.
   Foods sutiable for freezing preservation: Freezing locker plants. J. G. Woodroof. 34 pp.

- June 1941
- 213. Peanut breeding. I. Peanut breeding and characteristics of some new strains: II. Thiamin chloride and nicotinic acid content of peanuts and peanut products: III. Peptization of peanut proteins. B. B. Higgins, K. T. Holley, T. A. Pickett, and C. D. Wheeler. 18 pp. June 1941.

  214. The effect of fertilizer and lime on the yield of corn L. C. Olson and R. P. Bledsoe.

  215. T. pp. June 1941.
- pp. June 1941.

  215. The home vegetable garden. H. L. Cochran. 40 pp. June 1941.

  216. Peanut meal in livestock production. F. R. Edwards and Z. A. Massey. 19 pp. June 1941.

  217. Further studies with the muscadine grape. E. F. Savage, L. Ascham, T. L. Bissell, W. L. Brown, T. A. Pickett, W. A. Jenkins, M. M. Murphy, Jr., and J. G. Woodroof. 36 pp. June 1941.

  218. Better methods of pimiento production. H. L. Cochran. 41 pp. Oct. 1941.
- 218. Better methods of pimiento production. H. L. Cochran. 41 pp. Oct. 1941. 219. Factors affecting peach tree longevity in Georgia. E. F. Savage and F. F. Cowart. 15 pp.
- Mar. 1942.
- Farm rental arrangements in Georgia. J. C. Elrod, D. E. Young, and W. T. Fullilove. 50 pp. May 1942.

- Farm adjustment opportunities in Greene County, Georgia. M. C. Conner, W. E. Hendrix, C. R. Sayre, and W. T. Fullilove. 74 pp. Oct. 1942.
   The chemical composition of the cotton plant and the uptake of nutrients at different stages of growth. L. C. Olson and R. P. Bledsoc. 16 pp. Oct. 1942.
   The influence of neutralizing acid-forming fertilizers with dolomitic limestone on the response of cotton to potash. J. G. Futral and J. J. Skinner. 15 pp. Dec. 1942.

# GEORGIA (COASTAL PLAIN) AGRICULTURAL EXPERIMENT STATION, TIFTON

## BULLETINS

- Pastures for the Coastal Plain of Georgia. J. L. Stephens. 57 pp. June 1942.
   Seventeenth annual report, 1936-1937, crop yields shown for calendar year 1936. S. H. Statt. 129 pp. 1937?
- 9. Eighteenth annual report, 1937-1938. S. H. Starr. 137 pp. July 1938.
  30. Nineteenth annual report, 1938-1939. S. H. Starr. 133 pp. July 1939.
  31. Twentieth annual report, 1939-1940. S. H. Starr. 14 pp. July 1940.
  32. Twenty-first annual report, 1940-1941. S. H. Starr. 139 pp. July 1941.
  33. The growing of sea island cotton in the Coastal Plain of Georgia. J. G. Jenkins. 21 pp.

  Jan. 1942.
- 34. Peanut production in the Coastal Plain of Georgia, S. A. Parham, 19 pp. Jan, 1942, 35. Twenty-second annual report, 1941-1942, S. H. Starr, 154 pp. July 1942.

# HAWAII AGRICULTURAL EXPERIMENT STATION. HONOLULU

#### BULLETINS

- 86. Processing and chemical investigations of taro. J. H. Payne, G. J. Ley, and G. Akau.
- 42 pp. June 1941.

  87. Papaya production in the Hawaiian Islands. W. W. Jones, W. B. Storey, G. K. Parris, and F. G Holdaway. 64 pp. June 1941.

  88. Food for health in Hawaii. C. D. Miller and H. Y. Lind. 84 pp. 1942.

  89. Vegetation zones of Hawaii. J. C. Ripperton and E. Y. Hosaka. 60 pp. 1942.

# TECHNICAL BULLETINS

1. Soils of high-rainfall areas in the Hawaiian Islands. A. S. Ayres. 41 pp. Sept. 1941.

# IDAHO AGRICULTURAL EXPERIMENT STATION, MOSCOW

#### BULLETINS

- 239. Report of progress in solving Idaho's farm problems: Forty-eighth annual report for the year ending December 31, 1940. C. W. Hungerford, and others. 81 pp. Apr. 1941.
  240. The phosphorus requirement for growing and fattening beef steers. W. M. Beeson, D. W. Bolin, C. W. Hickman, and R. F. Johnson. 14 pp. May 1941.
  241. The production of ethyl alcohol from cull potatoes and other farm crops: A review of the status of alcohol production and utilization, and a report of the operations of the experimental alcohol plant at Idaho Falls. H. Beresford and L. M. Christensen. 28 pp. Sept. 1941.
  242. The mineola moth or destructive prame warm. W. F. Chull and G. Well. 1978.
- 242. The mineola moth or destructive prune worm. W. E. Shull and C. Wakeland. 7 pp. Dec. 1941.

- Dec. 1941.

  243. Organization and efficiency of dry-land wheat farms in eastern Idaho. L. J. Fenske and P. A. Eke. 14 pp. Apr. 1942.

  244. High lights in agricultural research in Idaho: Forty-ninth annual report for year ending Dec. 31, 1941. C. W. Hungerford, and others. 63 pp. Apr. 1942.

  245. Climate of the Palouse area of Idaho as indicated by fifty years of climatological data on the university farm. K. H. W. Klages. 19 pp. Dec. 1942.

  246. Diseases of small fruits in Idaho. E. C. Blodgett. 27 pp. June 1942.

  247. Onion seed production in Idaho. G. W. Woodbury and C. F. Dietz. 14 pp. Aug. 1942.

  248. Land values, mortgages, rents, and wheat yields of northern Idaho wheat lands. A. N. Nybroten. 19 pp. Apr. 1942.

  249. Growing strawberries in Idaho. L. Verner. 14 pp. Dec. 1942.

# ILLINOIS AGRICULTURAL EXPERIMENT STATION, URBANA

- Seventh annual Illinois corn performance tests, 1940. R. R. Copper, G. H. Dungan, A. L. Lang, J. H. Bigger, B. Koehler, and O. Bolin. Pp. 173-223. Jan. 1941.
   Effect of pasture on grade of beef. S. Bull, R. R. Snapp, and H. P. Rusk. Pp. 225-256. Apr. 1941.
   Effect of storage on yields of farm seed treated for disease control—wheat, oats, barley, corn B. Koehler. Pp. 258-276. Apr. 1941.
   Business policies of country grain elevators. L. J. Norton. Pp. 278-308. Apr. 1941.
   Pronagation of fowl- and pigeon-pox viruses in avian eggs and use of egg-cultivated viruses for immunization. C. A. Brandly. Pp. 309-336. July 1941.
   Retailer and consumer reaction to graded and branded beef. R. C. Ashby, R. J. Webh, E. C. Hedlund, and S. Bull. Pp. 337-391. Aug. 1941.

- Rural relief in Illinois: A study of home assistance in thirteen counties. D. E. Lindstrom and I. D. Johns. Pp. 393-440. Nov. 1941.
   Spring oats: Varieties for Illinois. G. H. Dungan, O. T. Bonnett, and W. L. Burlison. Pp. 441-471. Jan. 1942.
   Illinois corn performance tests, 1941. R. R. Copper, G. H. Dungan, A. L. Lang, J. H. Bigger, B. Koehler, and O. Bolin. Pp. 473-528. Feb. 1942.
   Spring wheat: Adaptability for Illinois. G. H. Dungan and W. L. Burlison. Pp. 529-540. Feb. 1942.

- 484. The problem of phosphate fertilizers: Their relation to the phosphate-supplying power of the soil and to the requirements of farm crops. E. E. DeTurk. Pp. 541-583. Apr. 1942

8

- Spring barley. G. H. Dungan and W. L. Burlison. Pp. 585-596. Apr. 1942.
   Poultry costs and profits: A six-year study of general farm flocks and semicommercial flocks. R. H. Wilcox and L. E. Card. Pp. 1-32. Apr. 1942.
- 487. Yield of sweet corn in relation to distance and rate of planting. W. A. Huelsen. Pp. 33-104. May 1942.
- 488. Effect of exercise on quality of beef. S. Bull and H. P. Rusk. Pp. 105-120. May 1942.
  489. Crossbreeding in swine: Does it offer an effective method for the improvement of market hogs? W. E. Carroll and E. Roberts. Pp. 121-136. July 1942.
- Hilinois loess—variations in its properties and distribution: A pedologic interpretation.
   G. D. Smith. Pp. 137-184. July 1942.
   Twelve years of farm accounts in Illinois. P. E. Johnston and H. C. M. Case. Pp. 185-271. Aug. 1942.
- 492. Marketing the Illinois peach crop. V. A. Ekstrom. Pp. 273-320. Sept. 1942.
- 493. Effect of nitrate of soda on deveelopment of the Halehaven peach. R. V. Lott. Pp. 321-,
- 384. Oct. 1942.

  494. Yields of corn hybrids harvested for silage and methods to determine best time to harvest.

  W. B. Nevens and G. H. Dungan. Pp. 385-412. Oct. 1942.

# SOIL REPORTS

70. Warren County soils. H. Wascher and R. S. Smith. 30 pp. Oct. 1941.

# INDIANA AGRICULTURAL EXPERIMENT STATION, LAFAYETTE

- 457. Separation methods affect cream quality. K. C. Boxell. 10 pp. Jan. 1941. 458. Plum variety trials at the Purdue farm, Bedford, Indiana. C. L. Burkholder. 20 pp. Apr. 1941.
- 459. An economic analysis of the production of peppermint and spearmint oils in Indiana. M. G. Smith and L. Robertson. 31 pp. Mar. 1941.
  460. Small agricultural holdings in two industrial areas in Indiana. H. L. Hawley. 35 pp. May 1941.

- 461. A study of some factors affecting the yield and market value of peppermint oil. N. K. Ellis, K. I. Fawcett, F. C. Gaylord, and L. H. Baldinger. 27 pp. June 1941.
  462. The supply and utilization of milk in Indiana. C. M. Hardin. 47 pp. Aug. 1941.
  463. An economic analysis of fluid milk markets in Indiana. C. M. Hardin. 55 pp. Aug. 1941.
  464. Principal methods of share renting and compensation for unexhausted improvements in four type-of-farming areas in Indiana. O. G. Lloyd, H. S. Morine, Jr., and J. R. Hays.
  24 pp. Jan. 1942.
- 465. Factors affecting mold content and quality of cream. P. R. Elliker and W. H. Brown. 15 pp. Jan. 1942.
- 466. Land-use adjustments needed on farms in Deer Creek Township, Cass County, Indiana. B. R. Hurt, E. C. Young, and L. Robertson. 32 pp. Feb. 1942.
  467. Rural youth in Indiana (18-28 years of age.) L. Robertson, H. F. Ainsworth, O. E. Baker, and N. T. Frame. 47 pp. Apr 1942.
  468. Soil fertility level as it influences plant nutrient composition and consumption. P. F.

- Baker, and N. T. Frame. 47 pp. Apr 1942.

  468. Soil fertility level as it influences plant nutrient composition and consumption. R. E. Lucas, G. D. Scarseth and D. H. Sieling. 43 pp. Apr. 1942.

  469. Seasonal variation of Indiana farm prices. E. L. Butz. 35 pp. May 1942.

  470. The value of various rations for fattening western lambs. C. Harper. 15 pp. May 1942.

  471. The maturation and discharge of ascospores of the apple scab fungus in Indiana and its significance in control of scab. R. C. Baines. 13 pp. May 1942.

  472. Chemical, histological and palatability changes in pork during freezing and storage in the frozen state. C. L. Shrewsbury, L. W. Horne, W. Q. Braun, R. Jordan, O. Milligan, C. M. Vestal and N. E. Weitkamp. 36 pp. May 1942.

  473. The management of farms in the limestone area of south-central Indiana with special reference to the provision and utilization of pasture. F. V. Smith. 51 pp. June 1942.

  475. Economic aspects of onion production in northern Indiana. L. Robertson. 23 pp. Aug. 1942.

- 476. A century of Indiana farm prices, 1841 to 1941. H. J. Houk. 96 pp. Jan. 1943. 477. Marketing timber in the north central area of Indiana. R. C. Brundage. 28 pp.
- A78. An economic study of farm labor in Indiana. B. R. Bookhout. 38 pp. Dec. 1942.
   Indiana milk supply for different market outlets. V. C. Manhart. 22 pp. Mar. 1943.
   A guide to agricultural programs in south central Indiana (Type-of-Farming Area No. 8).

   L. S. Robertson and others. 48 pp. Oct. 1942.

   Dairy cattle costs and returns in northwestern Indiana. L. Robertson, L. E. Slater and V. C. Manhart. 40 pp. Dec. 1942.

9 IOWA

# IOWA AGRICULTURAL EXPERIMENT STATION, AMES

#### BULLETINS P

P18. Principal potato insects of Iowa and their control. H. C. Manis and H. Gunderson. Pp. 510-516. Jan. 1941.
P19. 1940 Iowa corn yield test. M. S. Zuber and J. L. Robinson. Pp. 517-593. Feb. 1941.

Pp. 510-516. Jan. 1941.
P19. 1940 Iowa corn yield test. M. S. Zuber and J. L. Robinson. Pp. 517-593. Feb. 1941.
P20. Planning the cattle feeding program. R. Beresford. Pp. 597-618. Feb. 1941.
P21. The challenge to democracy. I. Democracy on trial. J. A. Vieg. Pp. 621-636. Feb. 1941.
P22. The challenge to democracy. II. The citizen and the power to govern. J. H. Powell. Pp. 637-651. June 1941.
P23. The challenge to democracy. III. The family farm in the machine age. L. B. Schmidt. Pp. 653-668. June 1941.
P24. The challenge to democracy. IV. The test of citizenship. V. A. Moody. Pp. 669-684.

- P24. The challenge to democracy. IV. The test of citizenship. V. A. Moody. Pp. 669-684.
  Aug. 1941.
  P25. The challenge to democracy. V. Democracy and nationalism. C. H. Matterson. Pp. 685700. Aug. 1941.
  P26. The challenge to democracy. VI. Toward a new rural statesmanship. E. D. Ross. Pp.
  701-716. Oct. 1941.
  P27. The challenge to democracy. VII. Improving public administration. H. C. Cook. Pp. 717.
  732. Feb. 1942.

- P27. The challenge to democracy. VII. Improving public administration. H. C. Cook. Pp. 717. 732. Feb. 1942.

  P28. The challenge to democracy. VIII. The machine and democracy. C. H. Norby. Pp. 733-748. Sept. 1942.

  P29. Supervised practice in vocational agriculture in Iowa. H. P. Sweany and J. A. Starrak. Pp. 1-32. Feb. 1941.

  P30. Soybean production in Iowa E. S. Dyas. Pp. 33-47. Mar. 1941.

  P31. The Iowa farmer and World War II. Pp. 49-70. Mar. 1941.

  P32. Handling and marketing Iowa sweet potatoes. A. T. Erwin, G. Shepherd, and P. A. Minges Pp. 73-103. May 1941.

  P33. Rat control. G. C. Decker, H. Gunderson, and H. J. Barre. Pp. 105-123. Oct. 1941.

  P34. The Iowa farm service guide: Governmental agricultural services, national, state, local. J. A. Vieg. Pp. 125-188. Oct. 1941.

  P35. Experience of some Iowa farmers with cattle feeding. J. A. Hopkins and R. B. Elwood. Pp. 189-216. Dec. 1941.

  P36. War came to the Iowa community. C. A. Anderson and B. Ryan. Pp. 217-280. Jan. 1942.

1942.
Life, service and cost of service of farm machines on 400 Iowa farms. J. B. Davidson and S. M. Henderson. Pp. 281-299. Jan. 1942.
P38. Iowa corn yield test, 1941. J. L. Robinson and M. S. Zuber. Pp. 301-377. Feb. 1942.
P39. Vegetable soybeans. M. G. Weiss, C. P. Wilsie, B. Lowe, and P. M. Nelson. Pp. 381-395. Feb. 1942.
P40. Victory vegetable garden E. S. Haber. Pp. 397-404. Mar. 1942.
P41. Growing potatoes in Iowa. E. S. Haber. Pp. 405-412. Mar. 1942.
P42. Fruits for the family. S. W. Edgecombe. Pp. 413-420. May 1942.
P43. Rodent pests of Iowa and their control. H. Gunderson and G. C. Decker. Pp. 421-436. May 1942.
P44. Weed control in growing corn. C. K. Shedd, E. V. Collins, and J. B. Davidson. Pp.

May 1942.
P44. Weed control in growing corn. C. K. Shedd, E. V. Collins, and J. B. Davidson. Pp. 437-468. May 1942.
P45. Liming Iowa soils. B. J. Firkins. Pp. 469-484. May 1942.
P46. Preservation of fruits and vegetables by freezing in refrigerated locker plants. H. H. Plagge and B. Lowe. Pp. 487-528. June 1942.
P47. Growing chickens from day old to laying age. W. M. Vernon, W. R. Whitfield and H. L. Wilcke. Pp. 529-552. June 1942.
P48. Production of hybrid corn. G. F. Sprague. Pp. 553-582. Sept. 1942.
P49. Hemp: A war crop for Iowa. C. P. Wilsie, E. S. Dyas, and A. G. Norman. Pp. 585-600. Dec. 1942.

#### RESEARCH BULLETINS

Classification of the organisms important in dairy products. III. Pseudomonas putrefaciens.
 H. F. Long and B. W. Hammer. Pp. 175-195. Jan. 1941.
 Precast tile beam floor. H. Giese and C. T. Bridgman. Pp. 197-282. May 1941.
 Pythium graminicola Subr. on barley. W. C. Ho, C. H. Meredith, and I. E. Melhus. Pp. 285-314. May 1941.
 Farm taxes and the cost of public services in relation to land resources in Ringgold County, Iowa. J. L. Spaulding. Pp. 317-394. June 1941.
 An examination of the accuracy of lattice and lattice square experiments on corn. W. G. Cochran. Pp. 397-415. Aug. 1941.
 Flavor development in salted butter by pure cultures of bacteria: Preliminary results. W. H. Hocker and B. W. Hammer. Pp. 317-345. Aug. 1941.
 Bacteriology of cheese. VI. Relationship of fat hydrolysis to the ripening of cheddar cheese C. B. Lane and B. W. Hammer. Pp. 349-384. Aug. 1941.
 Transmission tests of maize mutants induced by ultra-violet radiation. G. F. Sprague. Pp. 387-407. Aug. 1941.
 Incoming and outgoing payments of Iowa farm families. L. Witt. Pp. 409-472. Oct. 1941.

1941.

 The viability and germination of seeds of Convolvulus arvensis L. and other perennial weeds. E. O. Brown and R. H. Porter. Pp. 473-504. Jan. 1942.
 Strawberry production in southeastern Iowa as influenced by varieties, fertilizers and cultural practices. P. Minges, T. J. Maney, and B. S. Pickett. Pp. 505-568. Mar. 1942.

Influence of cultural factors on alfalfa seedling infection by Pythium debaryanum Hesse. W. F. Buchholtz. Pp. 569-592. Mar. 1942.
 Tables of orthogonal polynomial values extended to N=104. R. L. Anderson and E. E. Houseman. Pp. 593-672. Apr. 1942.
 Effects of crop acreage control features of AAA on feed production in 11 Midwest States. T. W. Schultz and O. H. Brownlee. Pp. 673-696. Apr. 1942.
 Poultry products research: A guide for research workers, including a list of some problems in project form. G. F. Stewart. Pp. 697-776. Apr. 1942.

- Estimation of income tax revenue and incidence. C. G. Hildreth. Pp. 777-824. Apr. 1942.
   Diacetyl and acetylmethylcarbinol production in the manufacture of unsalted butter. T. I.
   Hedrick and B. W. Hammer. Pp. 825-860. May 1942.
   Computing a regression of yield on weather. E. E. Houseman. Pp. 861-904.
   June 1942.
- June 1942.

  303. Prices of farm products in Iowa, 1851-1940. N. V. Strand, Pp. 905-998. May 1942.

  304. Statistical investigation of a sample survey for obtaining farm facts. R. J. Jessen. Pp. 1-104. June 1942.

  305. Efficiency of dairy rations containing various quantities of grain. K. M. Autrey, C. Y. Cannon, and D. L. Espe. Pp. 105-139. Sept. 1942.

  306. Social and ecological patterns in the farm leadership of four Iowa townships. B. Ryan. Pp. 141-202. Sept. 1942.

  307. Economic problems of low income farmers in Iowa, L. W. Witt, Pp. 205-263. Oct. 1942.

  308. Statistical comparisons of record-keeping farms and a random sample of Iowa farms for 1939. J. A. Hopkins. Pp. 265-287. Oct. 1942.

  309. Twenty-one years of Iowa farm records. J. A. Hopkins. Pp. 289-352. Oct. 1942.

#### SOIL REPORTS

- 80. Soil survey of Iowa: Decatur County. R. W. Simonson. 56 pp. May 1941. 81. Soil survey of Iowa: Marion County. R. W. Simonson and T. H. Benton. 84 pp. Nov.
- 82. Soil survey of Iowa: Ida County. R. W. Simonson and T. H. Benton. 51 pp. Apr. 1942.

#### CONTRIBUTIONS FROM IOWA CORN RESEARCH INSTITUTE

Vol. 2, No. 1. Maize bibliography for the years 1917 to 1936, inclusive. J. C. Cunningham. 364 pp. Mar. 1941.

# KANSAS AGRICULTURAL EXPERIMENT STATION, MANHATTAN

#### BULLETINS

- Kansas corn tests, 1940. R. W. Jugenheimer, A. L. Clapp, and H. D. Hollembeak. 47 pp. Jan. 1941.
   Summer fallow in Kansas. R. I. Throckmorton and H. E. Myers. 30 pp. Mar. 1941.
   Planning the farm business in the Bluestem Belt of Kansas. R. J. Doll. 23 pp. Mar.
- 1941.

- 295. Milk cooling on Kansas farms. J. Roberts and G. H. Larson. 39 pp. June 1941.
  296. Results of bindweed control experiments at the Fort Hays Branch Station, Hays, Kansas, 1935-1940. F. L. Timmons. 50 pp. June 1941.
  297. A second poultry survey in Kansas. L. F. Payne. 56 pp. Oct. 1941.
  298. Market quality of Kansas potatoes as determined by Federal inspection. F. L. Parsons. 36 pp. Nov. 1941.
- 36 pp. Nov. 1941.

  299. Kansas corn tests, 1941. A. L. Clapp, R. W. Jugenheimer, H. D. Hollembeak, and J. H. Lonquist. 47 pp. Jan. 1942.

  300. Synthetic fibers and textiles. H. M. Fletcher. 40 pp. Apr. 1942.

  301. The Atchison Experiment Orchard. R. J. Barnett. 31 pp. May 1942.

  302. Kansas weather and climate. A. B. Cardwell and S. D. Flora. 108 pp. Sept. 1942.

  303. Farm tenure law in Kansas. H. A. Hockley and H. Howe. 27 pp. June 1942.

  304. Sorghums for Kansas. A. F. Swanson and H. H. Laude. 63 pp. Sept. 1942.

  305. Area analysis and agricultural adjustments in Nemaha County, Kansas. W. H. Pine.

  47 pp. Oct. 1942.

  306. Soybean production in Kansas. I. W. Zahnley. 31 pp. Sept. 1942. Register of 202

- 306. Soybean production in Kansas. J. W. Zahnley. 31 pp. Sept. 1942. Revision of 282. 307. Distinguishing sex of chicks at hatching. D. C. Warren. 29 pp. Sept. 1942. 308. The economics of the poultry enterprise on Kansas farms. R. W. Hoecker. 48 pp. Dec.
- 1942. 309. Factors affecting butterfat prices in Kansas. G. Montgomery and F. L. Parsons. 28 pp. Dec. 1942.
- 310. Some cold storage studies of Kansas potatoes. F. L. Parsons. 18 pp. Dec. 1942.

#### TECHNICAL BULLETINS

The crossbreeding of poultry. D. C. Warren. 44 pp. Oct. 1942.
 The influence of some spray materials on the internal structure and chlorophyll content of apple leaves. W. F. Pickett and C. J. Birkeland. 54 pp. Dec. 1942.

#### MISCELLANEOUS

Research in milling industry: Report of progress. E. G. Bayfield, and others. 16 pp. Nov. 1942.

# KENTUCKY AGRICULTURAL EXPERIMENT STATION. LEXINGTON

- 411. Index numbers of prices and production of farm products in Kentucky. D. G. Card, A. J. Brown, and O. M. Farrington. Pp. 1-39. Jan. 1941.
   412. Resistance of strains of red clover to pea-aphid injury. H. H. Jewett. Pp. 41-55. Apr.
- 1941.

- Greenhouse tests of the availability of phosphorus in certain phosphate fertilizers. P. E.
  Karraker, H. F. Miller, C. E. Bortner, and J. K. Todd. Pp. 57-86. June 1941.
   Classification of Corynebacterium equi. D. W. Bruner and P. R. Edwards. Pp. 89-107.

- 14. Classification of Corynebacterium equi. D. W. Bruner and P. R. Edwards. Pp. 89-107.

  June 1941.

  15. Effect of tobacco mosaic on yield and quality of dark fire-cured tobacco. E. M. Johnson and W. D. Valleau. Pp. 109-114. June 1941.

  16. Effect of formaldehyde fumigation on mortality of chick embryos. W. M. Insko, Jr., D. G. Steele, and C. M. Hinton. Pp. 117-118. June 1941.

  17. Community land-use planning committees: Organization, leadership, and attitudes, Garrard County, Kentucky, 1939. H. W. Beers, R. M. Williams, J. S. Page, and D. Ensminger. Pp. 141-236. June 1941.

  18. Legal aspects of farm tenancy in Kentucky. H. A. Hockley and W. D. Nicholls. Pp. 237-264. June 1941.

  19. Systems of farming for the central bluegrass region of Kentucky. W. D. Nicholls, G. B. Byers, and J. H. Bondurant. Pp. 265-319. June 1941.

  19. Field tests of the relative effectiveness of different phosphate fertilizers. G. Roberts, J. F. Freeman, and H. Miller. 32 pp. Jan. 1942.

  19. Land-tenure classification and areas in Kentucky. J. H. Bondurant and W. C. Binkley. 50 pp. Jan. 1942.

  22. Growth of population in Kentucky 1860-1940. H. W. Beers. 24 pp. Apr. 1942.

  242. Crowth of population in Kentucky 1860-1940. H. W. Beers. 24 pp. Apr. 1942.

  242. Crowth of population in Kentucky 1860-1940. H. W. Beers. 24 pp. Apr. 1942.

  242. Crowth of population in Kentucky 1860-1940. D. Phillips and C. M. Aull. 24 pp. May 1942.

  242. Crowth of population in Kentucky. C. D. Phillips and C. M. Aull. 24 pp. May 1942.

- 1942. 425. Life history of the wireworm Aeolus mellillus (Say). H. H. Jewett. 11 pp. June 426. Equine virus abortion. W. W. Dimock, P. R. Edwards, and D. W. Bruner. 20 pp.

- 1942.
  427. Seasonal prices of spring lambs on Kentucky auction markets. C. D. Phillips and R. W. Rudd. 35 pp. June 1942.
  428. Trends in land use and related changes in Knott County, Kentucky, 1929-1939. R. H. Allen and C. G. Deaton. 39 pp. June 1942.
  429. Trends in Kentucky agriculture, 1929-1940. D. L. MacFarlane and M. M. Tharp. 51 pp. June 1942.
- 430. Plant-tissue tests as a guide to fertilizer treatment of tomatoes. E. M. Emmert. 48 pp.
- June 1942. 431. Trends in demand for tobaccos of the Scuthern States. B. S. White, Jr. 82 pp. June
- 1942. 432. Livestock movement at Kentucky auction markets. A. J. Brown and C. D. Phillips. 32 pp. June 1942.
- 433. Marketing and pricing chickens in Kentucky. J. B. Roberts. 47 pp. June 1942.
  434. Microorganisms of group E of the genus Salmonella. D. W. Bruner and P. R. Edwards.
  12 pp. Sept. 1942.
  435. Late-cut vs. early-cut soybean hay for stocker cattle. E. S. Good. 10 pp. Sept. 1942.
  436. Control of the corn earworm by clipping. E. M. Emmert and W. A. Price. 10 pp. Nov.
- Tobacco diseases. W. D. Valleau, E. M. Johnson, and S. Diachun. 60 pp. Dec. 1942.
   Effect of relative humidity and amount of turning on hatchability of turkey eggs and livability of poults. W. M. Insko, Jr., D. W. MacLaury, and A. T. Ringrose. 14 pp.
- 14 pp. Dec. 1942.
  439. New uses for low-grade tobacco. J. S. McHargue, C. W. Woodmansee, and K. E. Rapp. 12 pp. Dec. 1942.
  440. Composition of Rentucky bluegrass cut at different times during the year. G. D. Buckner, A. Harms, and W. M. Insko, Jr. 10 pp. Dec. 1942.

# LOUISIANA AGRICULTURAL EXPERIMENT STATION, UNIVERSITY STATION, BATON ROUGE

- A farm management and cost study of strawberry farms in southeastern Louisiana, 1937-38.
   J. N. Efferson. 31 pp. Jan. 1941.
   Effect of date of planting on corn yields, insect infestation, and fungous diseases. D. M. Johns and H. B. Brown. 28 pp. Jan. 1941.
   Cotton plantation laborers: A socio-economic study of laborers on cotton plantations in Concordia Parish, Louisiana. S. E. Grigsby and H. Hoffsommer. 40 pp. Feb. 1941.
   A cost of production study of tomatoes in north Louisiana. T. M. Montgomery, Jr., and J. N. Efferson. 12 pp. Jan. 1941.
   Home-mixed rations for poultry. H. J. Davis and J. B. Francioni, Jr. 4 pp. Feb. 1941.
   Precooling of strawberries. H. T. Barr and W. D. Poole. 22 pp. Mar. 1941.
   Precooling and drying of washed Irish potatoes. W. D. Poole and H. T. Barr. 23 pp. Apr. 1941.
   Part-time farming in a rural-industrial area of Louisiana. C. A. Boonstra and H. Jackson.

- 333. Part-time farming in a rural-industrial area of Louisiana. C. A. Boonstra and H. Jackson.

  18 pp. June 1941.
- 333. Part-time farming in a rural-industrial area of Louisiana. C. A. Boonstra and H. Jackson. 18 pp. June 1941.
   334. The resident laborer on the sugar cane farm. H. Hoffsommer. 50 pp. Nov. 1941.
   335. New settlement problems in the northeastern Louisiana Delta. P. E. Jones, J. E. Mason, and J. T. Elvove. 47 pp. Feb. 1942.
   336. The hot water treatment of sugar cane: A report of progress I. Introduction and review of investigations concerning hot water treatment of sugarcane. C. W. Edgerton; II. Effect of hot water treatment on the chlorotic streak. I. L. Forbes; III. Summary of results obtained in small plot tests at the Sugar Station, Baton Rouge. C. W. Edgerton, I. L. Forbes, and P. J. Mills; IV. Relation of the hot water treatment of sugarcane to the development of red rot. I. L. Forbes. V. Biochemical aspects of the hot water treatment of sugarcane. W. J. Luke. 27 pp. Feb. 1942.
   337. State tax collections and allocations, by parishes, 1938, Louisiana. B. M. Gile, C. Arny, and H. V. Lott. 30 pp. Feb. 1942.
   338. Factors affecting profits from dairy herds. D. M. Seath and E. W. Neasham. 15 pp. Feb. 1942.

339. The New Orleans market for fluid milk. R. M. Grigsby and R. A. Ballinger. 22 pp. Feb. 1942.

- 340. Rough rice marketing in Louisiana. C. A. Boonstra. 39 pp. Mar. 1942.
  341. Prohtable permanent pastures for dairy cattle. D. M. Seath. 15 pp. Mar. 1942.
  342. Feeding and management of dairy calves. C. H. Staples and D. M. Seath. 16 pp. Mar.
- 343. Observations and studies on the peat deposits of Louisiana. W. R. Dodson. 27 pp. May 1942.
- 344. How methods and promptness of cooling affects the quality of milk, with suggestions for producing high quality milk. A. J. Gelpi, C. S. McCleskey, and D. M. Seath. 15 pp. June 1942.
- Cotton marketing practices in selected local markets in Louisiana. H. W. Little and R. A. Ballinger. 27 pp. May 1942.
   Louisiana farm laborers and total war. H. Hoffsommer and R. J. Ramsey. 18 pp. May
- 1942.
- 347. Operating practices on the farmers' section of the French Market in New Orleans, Louisiana.
  W. R. Daniel and R. A. Ballinger. 26 pp. 1941.
  348. Studies of the production of sweet potatoes for starch or feed purposes. W. D. Kimbrough.
- 13 pp. June 1942.
- 349. Seed and soil treatment for the control of damping-off. L. H. Person and S. J. P. Chilton. 16 pp. June 1942.

16 pp. June 1942.

350. Entomological progress, number 3. Assembled by C. O. Eddy. 52 pp. Feb. 1942.

351. The Baton Rouge City Abattoir: relation to the retail meat supply, production and marketing problems of farmers. J. M. Baker. 20 pp. June 1942.

352. Fertilizer results with tung trees and recommended cultural methods. W. D. Kimbrough, J. C. Miller, and W. F. Wilson. 16 pp. Aug. 1942.

353. Farmer experience with the beef cattle enterprise in Louisiana. F. Merrick and J. N. Efferson. 31 pp. Aug. 1942.

354. Internal breakdown of sweet potatoes due to exposure to cold. W. D. Kimbrough and M. F. Bell. 9 pp. Oct. 1942.

355. The use of rice polishings in cooking. M. E. Hollinger. 8 pp. Nov. 1942.

356. A study of the diets of home demonstration club members' families in twenty-seven parishes of Louisiana. B. E. Bryson, C. Tucker, and H. J. Davis. 23 pp. Dec. 1942. of Louisiana. B. E. Bryson, C. Tucker, and H. J. Davis. 23 pp. Dec. 1942.

# MAINE AGRICULTURAL EXPERIMENT STATION, ORONO

# BULLETINS

- 404. Mineral nutrition of the genus Brassica with particular reference to boron. F. B. Chandler. Pp. 305-400. Mar. 1941.
  405. Report of progress for year ending June 30, 1941. F. Griffee. Pp. 401-535. June 1941.
  406. Farm organization and costs and returns in producing potatoes on farms in the St. John River area of Arookstook County, Maine, 1937. W. E. Schrumpf. Pp. 1-82. July 1941.
  407. Results of testing some laboratory methods for possible use in the detection of virus diseases in potato tubers. D. Folsom. Pp. 83-104. July 1941.
  408. Farm management on central Maine farms with dairy enterprises. E. Rauchenstein and A. E. Watson. Pp. 105-159. Jan. 1942.
  409. The biology of Fomes fomentarius. M. T. Hilborn. Pp. 161-214. Feb. 1942.
  410. Potato virus disease studies with tuber-line seed plots and insects in Maine, 1927 to 1938. D. Folsom. Pp. 215-250. June 1942.
  411. Report of progress for year ending June 30, 1942. F. Griffee. Pp. 252-412. June 1942.
  412. Egg production in Maine. G. F. Dow. 51 pp. July 1942.
  413. A study of land use in thirty-one towns in Aroostook County, Maine. A. E. Watson. Pp. 53-106. Aug. 1942.

# MARYLAND AGRICULTURAL EXPERIMENT STATION, COLLEGE PARK

- 439. Studies on corn ear worm control. L. P. Ditman, J. P. Secrest, and E. N. Cory. Pp. 203-223. Mar. 1941.

- 203-223. Mar. 1941.

  440. Classification of agricultural areas, Frederick County, Maryland. R. W. Harrison and P. L. Searfoss. Pp. 225-266. Apr. 1941.

  441. Status and trend of agricultural cooperation in Maryland. P. R. Poffenberger, J. R. Ives, and S. H. DeVault. Pp. 267-324. May 1941.

  A1. Feed and other costs of producing market eggs. T. C. Byerly. Pp. 1-29. July 1941.

  A2. Characteristics of farm property assessments in Maryland after the last reassessment. E. E. Miller and W. P. Walker. Pp. 31-72. Aug. 1941.

  A3. Economic aspects of the distilling industry in Maryland. S. H. DeVault, W. P. Walker, and R. W. Harrison. Pp. 73-89. Oct. 1941.

  A4. The potato enterprise in Garrett County, Maryland. A. B. Hamilton and S. H. DeVault. Pp. 90-121. Oct. 1941.

  A5. Farmers' mutual fire insurance in Maryland. P. R. Poffenberger, S. H. DeVault, and G. H. Goldsborough. Pp. 123-144. Nov. 1941.

  A6. Value of a fermentation by-product in poultry feeds. A. C. Groschke and H. R. Bird. Pp. 145-172. Nov. 1941.
- A6. Value of a fermentation by product in poultry feeds. A. C. Groschke and H. R. Bird. Pp. 145-172. Nov. 1941.
  A7. The pistol casebearer in Maryland. H. S. McConnell. Pp. 173-187. Mar. 1942.
  A8. Short-term credit on the lower Eastern Shore of Maryland. P. R. Poffenberger, S. H. DeVault, and W. J. Lodman. Pp. 188-220. Apr. 1942.
  A9. Extent of changes and equalization produced in farm property assessments by reassessing in Maryland. W. P. Walker and E. E. Miller. Pp. 221-248. May 1942.
  A10. Poisonous plants of Maryland in relation to livestock. G. B. Reynard and J. B. S. Norton. Pp. 249-312. May 1942.
  A11. Where Frederick and Salisbury, Md., get their food supplies. R. F. Burdette and W. P. Walker. Pp. 313-337. May 1942.

- A12. Relation of vitamin A to egg production and hatchability. M. Rubin and H. R. Bird. Pp. 338-350. May 1942.
  A13. Soybean-millet molasses silage for dairy cows. M. H. Berry and K. L. Turk. Pp. 351-360. June 1942.
  A14. Effects of waxing and pre-storage treatments upon prolonging the edible and storage qualities of apples. C. W. Hitz and I. C. Haut. Pp. 1-44. July 1942.
  A15. Labor requirements for selected crops in Maryland. A. B. Hamilton, G. S. Abshier, and S. H. DeVault. Pp. 45-94. Aug. 1942.
  A16. The broiler industry in Maryland. T. J. Davies, P. R. Poffenberger, and S. H. DeVault. Pp. 95-143. Aug. 1942.
  A17. Cost and advisability of raising dairy heifers. A. M. Ahalt and A. B. Hamilton. Pp. 144-180. Sept. 1942.
  A18. Wartime prices and agriculture. P. R. Poffenberger and S. H. DeVault. Pp. 181-211. Oct. 1942.

- Oct. 1942.
  A19. County road use and finance in Maryland. W. P. Walker. Pp. 212-249. Dec. 1942.
  A20. Cattle feeding experiments, 1938-1939, 1939-1940, 1940-1941, 1941-1942. F. H. Leinbach. Pp. 250-269. Dec. 1942.

#### POPULAR BULLETINS

1. Greater production of tomatoes for canning. C. H. Mahoney and H. A. Hunter. 12 pp.

# MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION, AMHERST

#### BULLETINS

- Annual report for the fiscal year ending Nov. 30, 1940. F. J. Sievers. 112 pp. Feb. 1941.
   Trace metals and total nutrients in human and cattle foods. E. B. Holland and W. S. Ritchie. 31 pp. July 1941.
   Pasture culture in Massachusetts. W. G. Colby. 44 pp. Oct. 1941.
   Spraying to control preharvest drop of apples, especially in relation to McIntosh. L. Southwick and J. K. Shaw. 16 pp. Feb. 1941.
   The propagation of some trees and shrubs by cuttings. W. L. Doran. 56 pp. Mar. 1941.
   The sanitary evaluation of private water supplies. R. L. France. 11 pp. Mar. 1941.
   The importance of length of incubation period in Rhode Island Reds. F. A. Hays. 12 pp. July 1941.

- The importance of length of incubation period in Rhode Island Reds. F. A. Hays. 12 pp. July 1941.
   Natural land types of Massachusetts and their use. A. B. Beaumont. 16 pp. May 1941.
   Rural youth in Massachusetts. G. Meldrum and R. Sherburne. 8 pp. Dec. 1941.
   Interrelationship of land uses in rural Massachusetts. D. Rozman. 48 pp. Dec. 1941.
   Annual report for the fiscal year ending November 30, 1941. 108 pp. Feb. 1942.
   Production and prices of milk in the Springfield-Holyoke-Chicopee milkshed in 1935. A. A. Brown and M. Booth. 32 pp. Feb. 1942.
   The composition and nutritive value of potatoes with special emphasis on vitamin C. W. B. Esselen, Jr., M. E. Lyons, and C. R. Fellers. 19 pp. Mar. 1942.
   A survey and study of spontaneous neoplastic diseases in chickens. C. Olson, Jr., and K. L. Bullis. 56 pp. Apr. 1942.
   Blooming dates of some selected hardy perennials. H. S. Tiffany. 55 pp. Apr. 1942.
   Bay State, a red forcing tomato bred for resistance to leaf mold. E. F. Guba. 8 pp. June 1942.
   The control of damping-off of vegetables by formaldehyde and other chemicals. W. L.
- 394. The control of damping-off of vegetables by formaldehyde and other chemicals. W. L. Doran, E. F. Guba, and C. J. Gilgut. 20 pp. June 1942.

  395. Preparation and use of artificial manures. K. J. Kucinski. 12 pp. July 1942.

  396. Breeding Rhode Island Reds for rapid feathering. F. A. Hays and R. Sanborn. 24 pp. Sept. 1942.
- 397. A civilian program for tree protection. M. A. McKenzie. 30 pp. Dec. 1942.

# MICHIGAN AGRICULTURAL EXPERIMENT STATION, EAST LANSING

#### SPECIAL BULLETINS

- 306. Soil reaction (pH) preferences of plants. C. H. Spurway. 36 pp. Apr. 1941.
  307. Michigan trappers. D. W. Hayne. 34 pp. June 1941.
  308. Refrigerator cars as farm storages. H. A. Cardinell. 38 pp. May 1941.
  309. The competitive position of dairying in Michigan. R. V. Baumann and E. B. Hill. 38 pp. June 1941.

- June 1941.
  310. Marketing of milk products in Lenawee County, Michigan. O. Ulrey. 42 pp. June 1941.
  311. Experience of Michigan rural banks with short term loans to farmers. R. J. Burroughs and H. S. Patton. 80 pp. Aug. 1941.
  312. The community situation as it affects agricultural extension work. C. R. Hoffer and D. L. Gibson. 35 pp. Oct. 1941.
  313. The first twenty years results in a Michigan apple orchard: Cultivation-covercrop vs. sodmulch culture. W. Toenjes. 18 pp. Dec. 1941.
  314. The muck soils of Michigan, their management and uses. P. M. Harmer. 128 pp. Dec. 1941.
  315. Financial management analysis of farmers' cooperatives in Michigan. H. E. Larzelere. 95 pp. May 1942.
  316. Acceptance of approved farming practices among farmers of Dutch descent. C. R. Hoffer. 35 pp. June 1942.
  317. Fruit and vegetable cooperatives in Michigan. G. N. Motts. 98 pp. June 1942.

- 318. Reorganization of public welfare in Michigan. E. B. Harper and D. L. Gibson. 80 pp. June 1942.
- 319. Migratory beet workers in Michigan. J. F. Thaden. 47 pp. Sept. 1942. 320. Potato storages for Michigan. A. D. Edgar, C. H. Jefferson and E. J. Wheeler. 39 pp. Dec. 1942.

#### TECHNICAL BULLETINS

- Landform types, a method of quantitative and graphic analysis and classification. L. A. Wolfanger. 24 pp. Feb. 1941.
   The detection, distribution, and mobility of certain elements in the tissues of plants growing under different conditions as determined by the spectrographic method. R. P. Hibbard. 30 pp. Feb. 1941.
   Studies in brucellosis. I. F. Huddleson, W. B. Ardrey, R. B. Pennell, W. H. Stahl, E. E. Hamann, M. Munger. 55 pp. Apr. 1941.
   Studies on soil actinomycetes in relation to potato scab and its control. G. KenKnight. 48 pp. Nov. 1941.
   Studies in the nature of the clonal variety. II. Selection within a periclinal chimera. V. R. Gardner and W. D. Baten. 48 pp. Jan. 1942.
   The rosette mosaic disease of peach. D. Cation. 24 pp. Oct. 1942.

#### MEMOIRS

4. Michigan log marks. Compiled by Work Projects Administration. 89 pp. Nov. 1941.

#### MISCELLANEOUS

Handbook of virus diseases of stone fruits in North America. E. M. Hildebrand, G. H. Berkeley, and D. Cation. 76 pp. May 1942.

#### QUARTERLY BULLETINS

Quarterly Bulletin, vol. 23, No. 3-vol. 25, No. 2. February 1941. November 1942. Each number contains various articles relating to agricultural practice, based on investigational work of the station.

# MINNESOTA AGRICULTURAL EXPERIMENT STATION. UNIVERSITY FARM, ST. PAUL

#### BULLETINS

- 351. Organization and operation of Minnesota cooperative oil associations. E. F. Koller and O. B. Jesness. 58 pp. Apr. 1941.
  352. Livestock auctions in Minnesota. A. A. Dowell and G. Engelman. 39 pp. June 1941.
  353. Farm tenancy in Minnesota. G. A. Pond. 56 pp. June 1941.
  354. Minhybrid corn varieties for Minnesota. H. K. Hayes, R. P. Murphy. E. A. Rinke, C. Borgeson. 40 pp. June 1941.
  355. Date and rate of lawn seeding. L. E. Longley. 8 pp. June 1941.
  356. Gourds—their culture, uses, identification, and relation to other cultivated Cucurbitaceae. A. E. Hutchins and L. Sando. 35 pp. June 1941.
  357. Corporate-owned farm land in Minnesota, 1936-1940. A. A. Dowell. 24 pp. Jan. 1942.
  358. Some problems of Minnesota rural youth. L. Nelson, D. Mitchell, and E. T. Jacobson. 32 pp. May 1942.
  359. Feeder cattle and sheep shipped into Minnesota. K. Bjorka, A. A. Dowell, and G. Engelman. 24 pp. May 1942.
  360. Hay crop silage. N. N. Allen and J. B. Fitch. 16 pp. May 1942.
  361. The cow's udder. W. E. Petersen. 16 pp. June 1942.
  362. Quality in frozen fruits and vegetables. J. D. Winter. 24 pp. June 1942.
  363. Battling weeds on Minnesota farms. H. K. Wilson, L. M. Stahler, A. C. Arny, R. B. Harvey, A. H. Larson, and R. H. Landon. 28 pp. June 1942.

#### TECHNICAL BULLETINS

- Some morphological and functional relationships of the bovine hypophysis. L. O. Gilmore, W. E. Petersen, and A. T. Rasmussen. 55 pp. Feb. 1941.
   Factors affecting the decreasing rate of flow of liquids through wood. B. E. Anderson, R. A. Gortner, and H. Schmitz. 70 pp. June 1941.
   Protein surveys of American hard spring and soft winter wheats. C. H. Bailey. 46 pp. June 1941.
   An ecological study of the forest tent caterpillar Malacosoma disstria Hbn., in northern Minnesota. A. C. Hodson. 55 pp. Nov. 1941.
   Crop rotation studies. H. Y. Chen and A. C. Arny. 46 pp. Dec. 1941.
   Influence of flowering and fruiting upon vegetative growth and tuber yield in the potato. W. L. Bartholdi. 20 pp. June 1942.
   Prenatal development of the bovine. L. M. Winters, W. W. Green, and R. E. Comstock. 50 pp. June 1942.

- 50 pp. June 1942.

  152. Growth and enzyme activity of *Penicillium roqueforti*. R. Thibodeau and H. Macy. 56 pp. June 1942.
- 153. The role of diet in blood regeneration. A. Biester and J. M. Leichsenring. 34 pp. June
- 1942. 154. The pathogenicity and genetics of some sorghum smuts. S. Vaheeduddin. 46 pp. June 1942.
- 155. The leafhoppers of Minnesota (Homoptera: Cicadellidae). J. T. Medler. 196 pp. June 1942.
- 156. The respiration and storage behavior of soybeans. P. E. Ramstad and W. F. Geddes. 54 pp. June 1942.

# MISSISSIPPI AGRICULTURAL EXPERIMENT STATION. STATE COLLEGE

#### BULLETINS

BULLETINS

354. An illustrated guide to care of ornamental trees and shrubs. F. S. Batson and R. O. Monosmith. 57 pp. May 1941.

355. Growing cucumbers for pickling in Mississippi. W. S. Anderson. 17 pp. Apr. 1941.

356. Pastures in Mississippi. H. W. Bennett. 39 pp. July 1941.

357. The influence on cotton production of nitrogen, phosphorus, and potassium and their combination. J. L. Anthony and J. Pitner. 15 pp. Mar. 1941.

358. Sweetpotato plant spacing. W. S. Anderson, E. A. Currey, E. B. Ferris, and J. C. Robert. 19 pp. May 1941.

359. Owner f. rm families in poor agricultural areas and cropper farm families in rich agricultural areas. D. Dickins. 19 pp. June 1941.

360. Fru. areas. D. Dickins. 19 pp. June 1941.

361. An economic study of truck farming in Copiah County, Mississippi, 1938-1940. M. Guin and D. W. Parvin. 35 pp. June 1941.

362. Conserving minerals and vitamins in vegetables. O. Sheets. 15 pp. Sept. 1941.

363. Jackstock production in Mississippi, R. H. Means. 23 pp. Oct. 1941.

364. Some contrasts in the levels of living of women engaged in farm, textile mill, and garment plant work. D. Dickins. 53 pp. Nov. 1941.

365. Improving levels of living of tenant families. D. Dickins. 18 pp. Jan. 1942.

366. Peanut production. H. O. West. 67 pp. Mar. 1942. Revision of 341.

367. Fertilizers for starch sweetpotatoes. W. S. Anderson. 22 pp. Apr. 1942.

368. Corn and oats. H. O. West. 127 pp. June 1942.

369. An illustrated guide to identification and landscape uses of Mississippi native shrubs. F. S. Batson. 61 pp. July 1942.

370. Broiler production. H. O. West. 90 pp. June 1942. Revision of 335.

371. Beef calf production in Mississippi under conditions of minimum investments in pastures and breeding herds. R. H. Means, A. E. Cullison, E. B. Ferris and S. P. Crockett. 25 pp. Nov. 1942.

372. A guide to planning clothes for the Mississippi farm family. D. Dickins and A. Bowie. 27 pp. Dec. 1942.

#### TECHNICAL BULLETINS

- 27. Methods of field curing hay. T. N. Jones, O. A. Leonard, and I. E. Hamblin. 47 pp. Jan. 1941.

The effect of genetical factors, seasonal differences and soil variations upon certain characteristics of upland cotton in the Yazoo-Mississippi Delta. J. W. Neely. 43 pp. Dec. 1940.
 Weed control and cotton tillage on Blackbelt (prairie) soils. T. N. Jones, I. E. Hamblin, and O. A. Leonard. 64 pp. Dec. 1941.
 Clothing supplies of socially participating white farm families of Mississippi. A. Bowie and D. Dickins. 51 pp. June 1942.

# MISSOURI AGRICULTURAL EXPERIMENT STATION, COLUMBIA

#### BULLETINS

422. Seasonal variation and economy of basic feeds, 1924-1940. H. M. Haag and N. St. John. 43 pp. Mar. 1941.
423. The normal growth of chickens. H. L. Kempster. 20 pp. Mar. 1941.
424. The oriental fruit moth in Missouri. C. W. Wingo. 15 pp. Mar. 1941.
425. Fattening early and late lambs. A. J. Dyer and L. A. Weaver. 16 pp. Apr. 1941.
426. Combine barvesters in Missouri. M. M. Jones and R. P. Beasley. 27 pp. Apr. 1941.
427. Planning for family relocation (preliminary report on procedures followed and results obtained in evacuation of the basin of the Wappapello Dam, Wayne County, Missouri). E. A. Wilkening and C. L. Gregory. 51 pp. Apr. 1941.
428. Factors affecting size and color of fruit (with reference to apples and peaches). A. E. Murneek. 19 pp. Apr. 1941.
430. Controlling bot and warble flies of livestock in Missouri. L. Haseman and W. E. Roland. 32 pp. July 1941.
431. Poultry housing conditions in Missouri. E. M. Funk. 11 pp. July 1941.
432. Registration, labeling and inspection of commercial fertilizers, 1940. M. F. Miller, L. D. Haigh, E. W. C. wan, and L. L. Wiseman. 56 pp. July 1941.
433. Representative Missouri weeds and their control. W. B. Drew and C. A. Helm. 216 pp. Aug. 1941.

Representative Missouri weeds and their control. W. B. Drew and C. A. Helm. 216 pp. Aug. 1941.
 The Missouri soil saving dam: Low-cost structure for use in farm plans for water management. J. C. Wooley, W. M. Clark, and R. P. Beasley. 23 pp. Oct. 1941.
 Game bird investigations: Quail and chukar partridges. E. M. Funk, J. C. Hamilton, and H. L. Kempster, 16 pp. Oct. 1941.
 A comparison of qualities and prices of sheets available in Missouri stores. (A comprehensive study of 96 brands of sheets.) N. G. Bennett. 16 pp. Oct. 1941.
 Selecting fruit varieties. T. J. Talbert and A. D. Hibbard. 51 pp. Nov. 1941.
 Investigations of agricultural problems: Work of the agricultural experiment station during the year ending June 30, 1938. F. B. Mumford and S. B. Shirky. 103 pp. Nov. 1941.
 Growing good crops of oats in Missouri. J. M. Poehlman. 12 pp. Jan. 1942. Revision of 402.
 Small grain production in the lowland region of southeast Missouri. B. M. King. 39 pp. Jan. 1942.
 The value of soybean oil meal in broiler rations. M. R. Irwin and H. L. Kempster, 16

Jan. 1942.
 441. The value of soybean oil meal in broiler rations. M. R. Irwin and H. L. Kempster, 16 pp. Feb. 1942.

442. Missouri woods and wood-using industries. W. C. Sechrist and R. H. Peck. 19 pp. Mar. 1942.

1942.
443. Measuring the productive value of pastures. H. J. L'Hote. 34 pp. May 1942.
444. Agricultural investigations: Work of the agricultural experiment station during the year
ending June 30, 1939. M. F. Miller, S. B. Shirky, H. J. L'Hote. 106 pp. Apr. 1942.
445. Soybean production in Missouri B. M. King and D. I. Allen. 31 pp. June 1942.
446. Vitamins. A. G. Hogan. 15 pp. June 1942.
447. Internal parasites of sheep. C. Elder. 8 pp. June 1942.
448. Economic aspects of recreational land use in the Lake of the Ozarks area. J. R. Snipe
and C. H. Hammar. 54 pp. June 1942.
449. Registration, labeling and inspection of commercial fertilizers, 1941. M. F. Miller, L. D.
Haigh, E. W. Cowan, and V. B. Williams. 52 pp. July 1942.
450. Growing raspberries and blackberries. H. G. Swartwout and W. R. Martin, Jr. 32 pp.
Aug. 1942.
451. Korean lespedeza seed as a protein supplement for milk production. H. A. Herman and

- 450. Growing raspberries and blackberries. H. G. Swartwout and W. R. Martin, Jr. 32 pp. Aug. 1942.

  451. Korean lespedeza seed as a protein supplement for milk production. H. A. Herman and A. C. Ragsdale. 7 pp. Aug. 1942.

  452. A study of towels and toweling for consumer use. N. G. Bennett and P. E. Keeney. 32 pp. Aug. 1942.

  453. Vitamins for livestock. A. G. Hogan. 23 pp. Aug. 1942.

  454. Nut tree culture in Missouri. T. J. Talbert. 32 pp. Sept. 1942.

  455. Peach culture in Missouri. T. J. Talbert. 36 pp. Sept. 1942.

  456. Trichomoniasis of turkeys. D. R. Knight, H. C. McDougle and A. J. Durant. 8 pp. Oct. 1042

1942. 457. The agricultural experiment station serves the people: Work of the agricultural experiment station during the year ending June 30, 1940. M. F. Miller, S. B. Shirky, and H. J. L'Hote. 119 pp. Dec. 1942.
458. Sanborn Field: Fifty years of field experiments with crop rotations, manure and fertilizers. G. E. Smith. 61 pp. Dec. 1942.
459. Codling moth control. L. Jenkins, H. E. Brown, C. W. Wingo, W. W. Smith, L. Haseman.

18 pp. Dec. 1942.

# RESEARCH BULLETINS

RESEARCH BULLETINS

325. Ulcerative enteritis in quail. A. J. Durant and E. R. Doll. 27 pp. Feb. 1941.

326. Variations in dairy bull semen with respect to its use in artificial insemination. H. A. Herman and E. W. Swanson. 82 pp. Feb. 1941.

327. Market organization and costs in the St. Louis wholesale fruit and vegetable market. H. M. Haag and L. H. Schweiter. 52 pp. Mar. 1941.

328. Growth and development, with special reference to domestic animals. LII. Relation between organ weight and body weight in growing and mature animals. S. Brody and H. H. Kibler. 41 pp. May 1941.

329. Estrus, ovulation, and related phenomena in the mare. F. N. Andrews and F. F. McKenzie. 117 pp. May 1941.

330. Nitrogen fixation and soil fertility exhaustion by soybeans under different levels of potassium. C. E. Ferguson and W. A. Albrecht. 52 pp. May 1941.

331. Needed local government reorganization in Ozark land use adjustment areas. F. A. Clarenbach. 132 pp. June 1941.

332. Supplementary value of various feedstuffs in brood sow rations. A. G. Hogan and S. R. Johnson. 35 pp. Sept. 1941.

333. Vitamin Be, pantothenic acid, and unsaturated fatty acids as they affect dermatitis in rats. L. R. Richardson, A. G. Hogan, and K. F. Itschner. 12 pp. Sept. 1941.

334. Factors affecting temperature changes in dressed poultry during refrigeration. I. L. Williams and E. M. Funk. 39 pp. Nov. 1941.

335. Growth and development with special reference to domestic animals. LIII. Resting energy metabolism and ventilation rate in relation to body weight in growing Jersey cattle, with a comparison to basal energy metabolism in growing man. S. Brody, H. H. Kibler. and A. C. Ragsdale. 20 pp. Dec. 1941.

336. Amphidiploids in the seven-chromosome Triticinae. E. R. Sears. 46 pp. Nov. 1941.

337. Chromosome pairing and fertility in hybrids and amphidiploids in the Triticinae. E. R. Sears. 20 pp. Dec. 1941.

338. The concentration and metabolism of sugar in ram semen. B. H. Moore and D. T. Mayer. 35 pp. Dec. 1941.

35 pp. Dec. 1941.

339. The effect of dextrose and sucrose sugars upon the properties of ice cream. W. H. E. Reid and K. R. Minert. 27 pp. Jan. 1942.

340. The effect of cultures and the relation of acid standardization to several of the physical and chemical properties of ice cream. W. H. E. Reid and L. E. Smith. 32 pp. Jan. 1942. 1942.

1942.
 341. A cytogenetic study of Zea and Euchlaena. J. G. O'Mara. 16 pp. Mar. 1942.
 342. Vitamins required by pigeons. J. G. Lee and A. G. Hogan. 15 pp. Apr. 1942.
 343. The relation of biotin to perosis in chicks. L. R. Richardson, A. G. Hogan and O. N. Miller. 10 pp. June 1942.
 344. The revegetation of abandoned cropland in the Cedar Creek area, Boone and Callaway Counties, Missouri. W. B. Drew. 52 pp. June 1942.
 345. The development of loessial soils in central United States as it reflects differences in climate. H. B. Vanderford and W. A. Albrecht. 31 pp. June 1942.
 346. Land use experience in Callaway County, Missouri. A. M. Meyers, Jr., and C. H. Hammar. 56 pp. June 1942.
 347. Fertility in the male domestic fowl. J. E. Parker, F. F. McKenzie, and H. L. Kempster. 50 pp. Aug. 1942.

50 pp. Aug. 1942.

348. Quantitative distribution of nitrogen and carbohydrates in apple trees. A. E. Murneek. Aug. 1942. 28 pp.

Aug. 1942.
 Growth and development, with special reference to domestic animals, LIV. Age changes in size, energy metabolism and cardio-respiratory activities of thyroidectomized cattle. S. Brody and R. F. Frankenbach. 11 pp. Sept. 1942.
 Growth and development, with special reference to domestic animals. LV. Resting energy metabolism and ventilation rate in relation to body weight in growing Holstein cattle. S. Brody, H. H. Kibler and A. C. Ragsdale. 14 pp. Sept. 1942.
 The use of consumer credit by Missouri farm families. M. Spicer, L. A. Young and S. Korando. 19 pp. Sept. 1942.

- The relation of the endocrine system to the regulation of calcium metabolism. I. L. Campbell and C. W. Turner. 134 pp. Oct. 1942.
   Studies of respiration rate of dairy bull spermatozoa. R. E. Ely, H. A. Herman, and C. F. Winchester. 24 pp. Oct. 1942.
   A study of some chemical and physical properties of the clay minerals nontronite, attapulgite and saponite. O. G. Caldwell and C. E. Marshall. 51 pp. Oct. 1942.
   Formation in vitro of highly active thyroproteins, their biologic assay, and practical use E. P. Reineke and C. W. Turner. 88 pp. Nov. 1942.
   Extraction, separation, and concentration of some anterior pituitary hormones. A. J. Bergman and C. W. Turner. 76 pp. Nov. 1942.
   The weight and thyrotropic hormone content of the anterior pituitary of swine. H. D. Elijah and C. W. Turner. 27 pp. Dec. 1942.
   The mummy disease of cultivated mushroom. C. M. Tucker and J. B. Routien. 27 pp. Dec. 1942.

# MONTANA AGRICULTURAL EXPERIMENT STATION, BOZEMAN BULLETINS

- Commercial fertilizer report for 1940. J. T. Kelly. A. R. Patton. 8 pp. Feb. 1941.
   Dry-land pasture experiments at the Judith Basin branch station, Moccasin, Montana. R. M. Williams and A. H. Post. 25 pp. Mar. 1941.
   Life history and control of the sugar-beet webworm, Loxostege sticticalis (L). J. H. Pepper and E. Hastings. 32 pp. Apr. 1941.
   Vitamin C content of winter fruits and vegetables. Get your money's worth. J. E. Richardson and H. L. Mayfield. 16 pp. May 1941.
   Agricultural planning, its economic and social aspects. C. F. Kraenzel and O. A. Parsons. 43 pp. June 1941.
   Potato yields and quality as affected by commercial fertilizers. F. M. Harrington, V. E. Iverson, and W. E. Pollinger. 20 pp. June 1941.
   Studies on control of bunt of wheat. H. E. Morris and A. M. Schlehuber. 18 pp. July 1941.
- 1941.

- Studies on control of bunt of wheat. H. E. Morris and A. M. Schlehuber. 18 pp. July 1941.
   Trends in market prices for Montana farm and ranch products. H. G. Halcrow and J. G. Diamond. 21 pp. Aug. 1941.
   Fertilizer investigations in Montana in 1940. A. H. Post. 17 pp. Aug. 1941.
   The Grain Inspection Laboratory: Twenty-five years' service to Montana. W. O. Whitcomb. 19 pp. Sept. 1941.
   Record of performance in Hereford cattle. B. Knapp, Jr., A. L. Baker, J. R. Quesenberry, and R. T. Clark. 30 pp. Dec. 1941.
   Overshot and current water wheels: Design, construction and installation for small power developments on ranch and farm. O. W. Monson and A. J. Hill. 30 pp. Jan. 1942.
   Va variety tests in Montana. A. M. Schlehuber, J. J. Sturm, and R. H. Bamberg. 20 pp. Jan. 1942.
   Growth and production factors in range cattle. B. Knapp, Jr., A. L. Baker, J. R. Quesenberry, and R. T. Clark. 13 pp. Mar. 1942.
   Studies on large and small type Hereford cattle. R. R. Woodward, R. T. Clark, and J. N. Cummings. 18 pp. Feb. 1942.
   Commercial tertilizer report for 1941. A. H. Kruse, W. E. Carlson, and A. R. Patton 10 pp. May 1942.
   Soils of Golden Valley County. L. F. Gieseker. 51 pp. Apr. 1942.
   Stindards and procedure for classification and valuation of land for assessment purposes. H. H. Lord, S. W. Voelker, and L. F. Gieseker. 28 pp. June 1942.
   Irrigation of seed and canning peas in the Gallatin Valley, Montana. O. W. Monson. 23 pp. Aug. 1942.
   Collective tenure on grazing land in Montana. G. H. Craig and C. W. Loomer. 64 pp. Feb. 1943.
   Wintering steers on crested wheatgrass. R. M. Williams, R. T. Clark and A. R. Patton. 18 pp. Nov. 1942.

- 407. Wired, 1970.
  408. Montana insect pests, 1941 and 1942: Twenty-ninth report of the State Entomologist. H. B. Mills. 36 pp. Dec. 1942.

# NEBRASKA AGRICULTURAL EXPERIMENT STATION, LINCOLN BULLETINS

- 330. The Nebraska tractor tests, 1920-1940. Supplement: Summary of results of the Nebraska tractor tests . . . includes only tractors on the market January 1, 1941. 48 pp.

- tractor tests . . includes only tractors on the market January 1, 1941. 48 pp. Jan. 1941.

  331. Alfalfa in Nebraska. H. M. Tysdal and T. A. Kiesselbach. 68 pp. May 1941.

  332. Poultry diseases and parasites. L. Van Es and J. F. Olney. 90 pp. Apr. 1941.

  333. Coperative oil associations in Nebraska. L. F. Garey and J. Mason. 34 pp. June 1941.

  334. Oil filters for internal combustion engines. C. W. Smith, T. B. Johnson, and E. L. Munter. 58 pp. Sept. 1941.

  335. Income levels of contract beet workers in Nebraska. F. Miller. 23 pp. Nov. 1941.

  336. Farm tenancy in Box Butte County, Nebraska. G. H. Lambrecht and L. W. Wallin. 28 pp. Jan. 1942.

  337. Farm tenancy in Clay County, Nebraska. L. F. Garey, G. H. Lambrecht, and F. Miller. 24 pp. Jan. 1942.

  338. The Nebraska tractor tests, 1920-1941. 52 pp. Jan. 1942.

  339. Soybean production in Nebraska. T. A. Kiesselbach and W. E. Lyness. 18 pp. Apr. 1942.

  340. Cost of marketing hogs shipped to the Omaha market. G. H. Lambrecht and L. F. Garey. 16 pp. Apr. 1942.

  341. Sugar beet costs and management in irrigated sections of western Nebraska. G. H. Lambrecht and W. L. Ruden. 20 pp. May 1942.

  342. The manufacture of Cornhusker cheese. E. L. Reichart and P. A. Downs. 13 pp. June 1942.

  343. Wintering rations for cattle. R. R. Thalman. 44 pp. [1942]
- 343. Wintering rations for cattle. R. R. Thalman. 44 pp. [1942] 344. Sunlight lamps for laying hens. F. E. Mussehl and F. D. Yung. 8 pp. Sept. 1942.

# RESEARCH BULLETINS

- 121. The geographic distribution of Azotobacter and Rhizobium meliloti in Nebraska soils in relation to certain environmental factors. H. B. Peterson and T. H. Goodding. 24 pp. June 1941.
- 122. The relation of temperature to the embryonic and nymphal development of the differential grasshopper Melanoplus differentialis Thomas. M. H. Swenk and C. H. Bratt. 24 pp. Nov. 1941.
- 123. The relations of vegetative composition and cattle grazing on Nebraska range land. T. E. Brinegar and F. D. Keim. 37 pp. Mar. 1942.
   124. Alfalfa breeding. H. M. Tysdal, T. A. Kiesselbach, and H. L. Westover. 46 pp. June 1942.

- 125. One hundred studies of the calcium, phosphorus, iron, and nitrogen metabolism and requirement of young women. R. M. Leverton and A. G. Marsh. 33 pp. Apr. 1942.
   126. Physical and chemical properties of soil profiles of the Scott, Fillmore, Butler, Crete, and Hastings series. H. W. Smith and H. F. Rhoades. 43 pp. June 1942.
   127. An analysis of pressure gasoline and pressure kerosene stoves. A. E. Baragar. 63 pp. Mar. 1942.
- 128. Swine erysipelas. L. Van Es and C. B. McGrath. 43 pp. June 1942. Revised edition of 84.
- 129. Conception rate in dairy cattle by artificial insemination at various stages of estrus. G. W. Trimberger and H. P. Davis. 14 pp. Apr. 1943.
   130. Swine erysipelas infection in man. L. Van Es. 34 pp. Aug. 1942.

# NEVADA AGRICULTURAL EXPERIMENT STATION, RENO

#### BULLETINS

- 155. A short cut method of computing grazing capacity ratings from range survey forage estimates, F. B. Harris. 15 pp. Apr. 1941.
  156. Ranch organization and operation in northeastern Nevada. G. A. Carpenter, M. Clawson, and C. E. Fleming. 81 pp. Nov. 1941.
  157. Rubber from rabbit brush (Chrysothamnus nauseosus). S. B. Doten. 22 pp. Mar. 1942.
  158. The potato eelworm. S. B. Doten. 7 pp. Mar. 1942.
  159. Bronco grass (Bromus tectorum) on Nevada ranges. C. E. Fleming, M. A. Shipley, and M. R. Miller. 21 pp. Apr. 1942.
  160. Estimating the value of range forage for grazing use by means of an animal-unit-month factor table. M. A. Shipley, C. E. Fleming, and B. S. Martineau. 26 pp. June 1942.
  161. Feeding experiments with beef cattle to determine nutritive values of first-, second-, and third-crop alfalfa hay. F. B. Headley. 17 pp. June 1942.
  162. More beef from the same number of cattle on Nevada ranches. C. A. Brennen and C. E. Fleming. 13 pp. Aug. 1942.

- Fleming. 13 pp. Aug. 1942.

  163. The Nevada Agricultural Experiment Station, 1888-1943. An administrative history, with comment upon it. S. B. Doten. 75 pp. Nov. 1942.

# NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION, DURHAM

- 330. Agricultural research in New Hampshire: Annual report for the year 1940. M. G. Eastman. 42 pp. May 1941.
  331. Research of the New Hampshire Experiment Station in animal breeding and nutrition. E. G. Ritzman. 20 pp. June 1941.
  332. The local structure of milk prices in New Hampshire markets. A. MacLeod. 60 pp. June 1941.
  333. Inspection of commercial feeding stuffs, 1941, made for the State Department of Agriculture. T. O. Smith and H. A. Davis. 46 pp. July 1941.
  334. Research of the State Department of Agriculture. B. G. Sanborn. 14 pp. July 1941.
  335. Protein requirements of chickens at various stages of growth and development II. A. F.

- 335. Protein requirements of chickens at various stages of growth and development. II. A. E. Tepper, R. C. Durgin, T. B. Charles, S. R. Shimer, and H. A. Davis. 15 pp. Sept. 1941
- 336. Inspection of commercial fertilizers for 1941. T. O. Smith and H. A. Davis. 11 pp. Nov.
- 1941.
- The place of woodland in the farm organization in Coos County, New Hampshire. J. M. Chandler. 34 pp. June 1942.
   The problem of moisture in poultry house litter: A three year study. T. B. Charles, A. E. Tepper, W. T. Ackerman, B. J. French, R. C. Durgin, and R. B. Halpin. 30 pp. June 1942.
- 339. New Hampshire rural towns' comparative road burdens and road services. W. R. Parks and J. C. Holmes. 31, 19 pp. June 1942.

  340. Dairy opportunity areas in New Hampshire. H. C. Woodworth and J. C. Holmes. 29 pp. June 1942.

  341. Results of seed tests for 1942. B. G. Sanborn. 11 pp. July 1942.

  342. Inspection of commercial feedingstuffs 1942. T. O. Smith and H. A. Davis. 58 pp. July
- 1942.
- 343. Inspection of commercial fertilizers for 1942. T. O. Smith and H. A. Davis. 7 pp. Oct. 1942.
- Land utilization in New Hampshire. II. Summer homes and the rural economy. J. C. Blum. 54 pp. Oct. 1942.
   Agricultural research in New Hampshire: Annual report for the period ending June 30, 1942. M. G. Eastman. 69 pp. Dec. 1942.

#### TECHNICAL BULLETINS

Traits that determine the efficiency of the pig as a transformer of energy. E. G. Ritzman and N. F. Colovos. 29 pp. June 1941.
 An insect toximeter: Studies of contact insecticides XV. W. C. O'Kane, L. C. Glover, and R. L. Blickle. 10 pp. June 1941.
 Mineral composition of freshly fallen white pine and red maple leaves. W. H. Lyford, Jr. 12 pp. June 1941.

77. Alineral composition of freshly fallen white pine and red maple leaves. W. H. Lyford, Jr. 12 pp. June 1941.

78. Studies on the bitter-pit disease of apples. O. R. Butler and S. Dunn. 10 pp. June 1941.

79. Penetration of oils into insect eggs: a. Influence of oil characteristics. b. Influence of age of egg and of species. Studies of contact insecticides XVI. R. L. Blickle. 14 pp. June 1942.

# NEW JERSEY AGRICULTURAL EXPERIMENT STATION, NEW BRUNSWICK

#### BULLETINS

- 687. A 3-year study of out-of-season hatching. F. P. Jeffrey and C. S. Platt. 23 pp. Mar. \_\_ 1941.
- 688. The stainless steel gravity milk mixer. H. E. Roberts and J. W. Bartlett. 3 pp. Feb. 1941.

- 1941.
  Development of machinery for harvesting and storing grass silage. H. E. Besley, C. Eby, and W. R. Humphries. 28 pp. Apr. 1941.

  690. The owls of New Jersey. L. A. Hausman. 36 pp. May 1941.

  691. Growth and composition of the strawberry plant as affected by source of nitrogen and pH value of the nutrient medium. J. H. Clark. 48 pp. Dec. 1941.

  692. Influence of thiamin additions on germination and growth of certain grasses and of white clover. G. H. Ahlgren. 19 pp. Apr. 1942.

  693. The carrot weevil, Listronotus latiusculus (Bohe), in New Jersey and its control. B. B. Pepper. 20 pp. May 1942.

  694. Growing vegetables with fertilizer in water. V. A. Tiedjens and L. G. Schermerhorn. 20 pp. June 1942.

  695. Feeding grass silage. C. B. Bender. 8 pp. May 1942.

  696. The role of breeding in the control of fowl paralysis. F. P. Jeffrey, F. R. Beaudette, and C. B. Hudson. 4 pp. Dec. 1942.

  697. Sweet potato investigations in New Jersey. V. A. Tiedjens and L. G. Schermerhorn. 20 pp. Sept. 1942.
- pp. Sept. 1942.

  698. Soft rot of sweet potatoes and its control. R. H. Daines. 14 pp. Sept. 1942.

  699. Chemical composition of sewage sludges, with particular reference to their phosphoric acid contents. W. Rudolfs and H. W. Gehm. 15 pp. Nov. 1942.

  700. Egg-production behavior of hens. W. C. Thompson. 12 pp. Nov. 1942.

  701. Land subdivision in the New Jersey pines. J. F. Hauck and A. T. M. Lee. 52 pp. Nov.
- 1942.
- 702. Consumption of milk and of some other dairy products in metropolitan New Jersey. E. H. Rinear. 14 pp. Oct. 1942.
   703. A study of some phases of apple production in southern New Jersey. 16 pp. Dec. 1942.

# NEW MEXICO AGRICULTURAL EXPERIMENT STATION. STATE COLLEGE

- 274. Quality of cotton produced in New Mexico, 1936-1939. F. Lowenstein and J. C. Overpeck. 26 pp. Feb. 1941.

  275. Grape production in eastern New Mexico. D. R. Burnham. 23 pp. Mar. 1941.

  276. The cage system for managing laying hens. L. N. Berry. 14 pp. Mar. 1941.

  277. Market outlets for New Mexico onions. R. P. Callaway. 31 pp. Apr. 1941.

  278. Reseeding trials on arid range land. J. O. Bridges. 48 pp. Apr. 1941.

  279. Field-crop experiments at the Conservancy District Substation, 1938-1940. R. Stroud. 24 pp. Apr. 1941.

- pp. Apr. 1941.
  280. Fertilizer experiments with Acala cotton on irrigated soils. D. A. Hinkle and G. Staten.
  15 pp. May 1941.
  281. Effect of irrigation practices on the growth and yield of White Grano onions. A. S. Curry.
  34 pp. May 1941.
  282. Seasonal calcium and phosphorus requirements of range cattle, as shown by blood analyses.
  J. H. Knox, J. W. Benner, and W. E. Watkins. 28 pp. June 1941.
  283. Root rot and its control. R. F. Crawford. 13 pp. July 1941.
  284. Ornamental trees and shrubs for New Mexico. J. V. Enzie. 48 pp. Oct. 1941.
  285. Lamb feeding in the irrigated valleys of southern New Mexico. H. B. Pingrey. 46 pp.
  Nov. 1941

- Lamb feeding in the irrigated valleys of southern New Mexico. H. B. Pingrey. 46 pp.
  Nov. 1941.
   Profitable feeding and management practices for poultry. L. N. Berry. 19 pp. Jan. 1942.
   The use of phosphorus and calcium supplements for range livestock in New Mexico. J. H.
  Knox and W. E. Watkins. 18 pp. Feb. 1942.
   Control of insect pests and diseases of New Mexico crops. J. R. Eyer and R. F. Crawford.
  50 pp. Feb. 1942.
   Use of phosphatic fertilizers on alfalfa. D. A. Hinkle. 19 pp. Mar. 1942.
   Cottonseed treatments in New Mexico. G. Staten. 32 pp. Apr. 1942.
   Reseeding practices for New Mexico ranges. J. O. Bridges. 48 pp. Apr. 1942.
   (Technical.) Effect of irrigation waters and cropping on the nutrients and exchangeable
  bases of desert soils. C. W. Botkins and E. C. Smith. 28 pp. May 1942.
   Organization and operation of New Mexico cooperative cotton gin associations. R. P.
  Callaway. 35 pp. May 1942.

- Spraying for control of preharvest drop of apples. G. W. Schneider and J. V. Enzie. 15 pp. July 1942.
   Life history and control of the giant apple root borer. J. R. Eyer. 14 pp. July 1942.
   Sizes and types of farms in relation to farm income in Quay County, New Mexico. P. M. McMains and P. W. Cockerill. 41 pp. Oct. 1942.
   Community planning in Eddy County, New Mexico. S. Johansen and M. Rossoff. 20 pp. Dec. 1942.
   Hop production for New Mexico. P. E. Neele J. W. Penner and J. H. Karne. 22

- 298. Hog production for New Mexico. P. E. Neale, J. W. Benner, and J. H. Knox. 23 pp. Dec. 1942.

# NEW YORK (CORNELL) AGRICULTURAL EXPERIMENT STATION, ITHACA

- 747. Some facts concerning costs of operation of farm motor trucks. M. P. Rasmussen and P. S. Williamson. 29 pp. Jan. 1941.
  748. Fertilizers and field crops. I. Results of sixteen years of experiments on Volusia silt loam in Allegany County, New York. E. L. Worthen. 28 pp. Mar. 1941.
  749. Fertilizers and field crops. II. Results of sixteen years of experiments on Honeoye silty clay loam in Monroe County, New York. E. L. Worthen. 26 pp. Mar. 1941.
  750. Fertilizers and field crops. III. Results of twenty years of experiments on Volusia silt loam in Cortland County, New York. E. L. Worthen. 15 pp. Mar. 1941.
  751. Costs of farm power and equipment. J. P. Hertel and P. Williamson. 38 pp. Apr. 1041
- 1941.

- Studies on the control of internal breakdown of table beets by the use of boron. G. J. Raleigh, O. A. Lorenz, and C. B. Sayre. 16 pp. Apr. 1941.
   Further studies of the influence of different levels of fat intake upon milk secretion, III. L. A. Maynard, J. K. Loosli, and C. M. McCay. 18 pp. Apr. 1941.
   A comparative study of high-temperature, short-time, and holder pasteurization. A. Millenky and H. J. Bruckner. 26 pp. Apr. 1941.
   Soil and pasture management for Long Island, New York. A. F. Gustafson and D. B. Johnstone-Wallace. 44 pp. Apr. 1941.
   Costs and returns from farm enterprises. P. S. Williamson. 41 pp. May 1941.
   The alflata snout beetle: Its control and suppression. C. E. Palm, C. Lincoln, and A. B. Buchholz. 50 pp. May 1941.
   Coyer leafhopper (Accaptagallia sanguinolenta Prov.). T. C. Watkins. 24 pp. May 1941.
- Buchholz. 50 pp. May 1941.

  758. Clover leafhopper (Aceratagallia sanguinolenta Prov.). T. C. Watkins. 24 pp. May 1941.

  759. Costs and returns for the cabbage enterprise, 1938 and 1939. R. W. Hoecker. 60 pp. June
- 1941.
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  21 pp. Oct. 1941.

- 21 pp. Oct. 1941.
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- 32 pp. Nov. 1941.

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  18 pp. Dec. 1941. 774. Relative economy of nutricins in secondary of the property of th

- 779. Problems of packaging vegetables for upstate New York markets. H. Platenius. 19 pp. Apr. 1942.
- 780. The production and marketing of cabbage in New York. R. W. Hoecker. 51 pp. Apr. 1942.
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  782. Thirty years of farming in Tompkins County, New York. E. G. Misner. 59 pp. June 1942.
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- 1942. 786. Population trends in New York state, 1900 to 1940. W. A. Anderson. 71 pp. Nov. 1942.

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  789. Soil and field-crop management for the Catskill-Mohawk area of New York. A. F. Gustafson. 32 pp. Dec. 1942.

#### MEMOIRS

- 234. Studies on bitter pit of the apple. R. M. Smock. 45 pp. Apr. 1941. 235. A study of dormancy in seeds of Polygonum. O. L. Justice. 43 pp. May 1941. 236. Biology and ecology of the alfalfa snout beetle. C. Lincoln and C. E. Palm.
- May 1941.

  237. Reproduction of the field mouse Microtus pennsylvanicus (Ord.). W. J. Hamilton, Jr. 23 pp. May 1941.

  238. The influence of age and rate of breeding upon the ability of the female rat to reproduce and raise young. S. A. Asdell, R. Bogart, and G. Sperling. 26 pp. June 1941.

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 Studies concerning the supply of available potassium in certain New York orchard soils. W. Reuther. 51 pp. Dec. 1941.
 Effects of currency depreciation on prices, production, and foreign trade, 1929 to 1937. C. van der Merwe. 47 pp. Apr. 1942.
 A controlled attempt to restore fertility in dairy cattle by treatment with gonadic and gonadotropic hormones. S. A. Asdell, M. G. Fincher, S. E. Smith, and F. I. Elliott. 27 pp. May 1942.
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 Internal breakdown of table beets. O. A. Lorenz. 42 pp. June 1942.
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 The effect of various diluters, cooling rate, temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature and temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature of storage, and some other factors, or the livebility of temperature of

249. The effect of various diluters, cooling rate, temperature of storage, and some other factors, on the livability of spermatozoa in stored samples of bull semen. E. L. Willett and G. W. Salisbury. 45 pp. Nov. 1942.

# NEW YORK STATE AGRICULTURAL EXPERIMENT STATION, **GENEVA**

# BULLETINS

- 697. The influence on milk production of a definite time interval for milking cows by machine. A. C. Dahlberg. 13 pp. July 1941.
  698. Current contributions on insect control. L. A. Carruth, and others. 62 pp. Jan. 1942.
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# TECHNICAL BULLETINS

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15 pp. July 1941.
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15 pp. Dec. 1941.

262. Nutritive value of dried and dehydrated fruits and vegetables. D. K. Tressler. 44 pp.

Mar. 1942.

263. The bacterial population of paper milk containers in relation to methods of moisture proofing. J. W. Rice. 29 pp. Apr. 1942.

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267. The epidemiology and control of downy mildew on hops. R. O. Magie. 48 pp. Dec. 1942.

# NORTH CAROLINA AGRICULTURAL EXPERIMENT STATION, STATE COLLEGE STATION, RALEIGH

#### BULLETINS

- Farmers' mutual fire insurance companies in North Carolina, M. C. Leager. 19 pp. Jan. 1941.
   Soil fertility studies with peanuts. E. R. Collins and H. D. Morris. 23 pp. June 1941.
   Soil fertility studies in the Piedmont. I. The effects of limestone and fertilizers in a 4-year rotation. C. B. Williams, W. H. Rankin, and J. W. Hendricks. 36 pp. Jan. 1942.
   Fertilizing strawberries in North Carolina. R. A. Lineberry and E. R. Collins. 20 pp. Mar. 1942.
   Mar. 1942.
   Parkell and J. G. Wasyer. 40 pp. 13.
- rbaceous perennials for North Carolina. G. O. Randall and J. G. Weaver. 40 pp. June 1942. 333. Herbaceous
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- Mar. 1942.
  335. The cabbage maggot in North Carolina. B. B. Fulton. 24 pp. June 1942.
  336. Winter barley in North Carolina. G. K. Middleton, W. H. Chapman, R. W. McMillen, J. W. Hendricks, and D. W. Colvard. 19 pp. Nov. 1942.
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- pp. Dec. 1942.

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#### TECHNICAL BULLETINS

- 67. Food storage in the peach tree in relation to nitrogen fertilization. C. F. Williams. 19 pp. Mar. 1941.

- Mar. 1941.
   Satterfield. 39 pp. May 1942.
   Variations in flue-cured tobacco prices. S. L. Clement. 38 pp. May 1942.
   An economic analysis of farming in the Cedar Creek Soil Conservation Demonstration Area, Franklin County, North Carolina, 1935. R. E. L. Greene. 32 pp. May 1942.
   A preliminary study of cotton ginning costs in North Carolina. S. L. Clement. 23 pp. Line 1942.
- June 1942.
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- 73. Cropper farming in the Coastal Plain. G. W. Forster. 58 pp. Sept. 1942.

# NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION, STATE COLLEGE STATION, FARGO

- Blight and other damage of durum wheat in 1940. I. Effect on macaroni-making quality.
   R. H. Harris and L. D. Sibbitt. II. Effects of blights and other damage on durum and hard wheat seed. W. E. Brentzel. 14 pp. Jan. 1941.
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   Flax production and climate of North Dakota and Minnesota, 1919-1937. T. H. Hopper and M. Johnson. 71 pp. Feb. 1941.
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   Aug. 1941.
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- Aug. 1941.

  302. Grain storage on the farm, T. E. Long and M. G. Cropsey. 68 pp. June 1941.

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  306. Summer fattening of farm flock lambs. 11 pp. June 1941.

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- 310. Bounty tomato in standard yield trials in 1940 and 1941. H. Mattson. 7 pp. Mar. 1942.
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- June 1942. 318. Proso, corn and barley as feeds for hogs on alfalfa pasture. F. W. Christensen, P. E. Johnson, A. Severson, E. P. Painter, and T. H. Hopper. 13 pp. June 1942.

# OHIO AGRICULTURAL EXPERIMENT STATION, WOOSTER

#### BULLETINS

618. Bloom period and yield of apples. C. W. Ellenwood. 21 pp. Jan. 1941. 619. Control of lawn weeds and the renovation of lawns. F. A. Welton and J. C. Carroll. 85 pp. Mar 1941. 620. Fertilization of ornamental trees, shrubs, and evergreens. L. C. Chadwick. 29 pp. May

1941.

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- Sept. 1941

- Sept. 1941.

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- 38 pp. June 1942.

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  638. Public revenue in Ohio with especial reference to rural taxation. J. D. Thewlis and J. I. Falconer. 48 pp. Dec. 1942.

# OKLAHOMA AGRICULTURAL EXPERIMENT STATION. STILLWATER

# BULLETINS2

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- Oct. 1941.
- Oct. 1941.

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- Sept. 1942.
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#### TECHNICAL BULLETINS3

10. The utilization of feed as affected by grinding. V. G. Heller, R. Wall, and H. M. Briggs.

10 pp. July 1941.

T11. The transmission of anaplasmosis by horseflies (Tabanidae). D. E. Howell, C. E. Sanborn, L. E. Rozeboom, G. W. Stiles, and L. H. Moe. 23 pp. Oct. 1941.

<sup>&</sup>lt;sup>2</sup>Beginning with No. 246 this series becomes Bulletin B. <sup>3</sup>Beginning with No. 11 this series becomes Bulletin T.

- T12. The chemical composition of Atlas and Dwarf Yellow milo plants in relation to chinch bug resistance. J. E. Webster and V. G. Heller. 29 pp. Apr. 1942.
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# OREGON AGRICULTURAL EXPERIMENT STATION, CORVALLIS

#### BULLETINS

- Twenty-two years of soil fertility investigations in the Willamette Valley, Oregon. W. L. Powers and C. V. Ruzek. 23 pp. Mar. 1941.
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  393. Sprays, their preparation and use. R. H. Robinson. 34 pp. May 1941.
- 393. Sprays, their preparation and use. R. H. Robinson. 34 pp. May 1941.

  394. Irrigation requirement of arable Oregon soils. W. L. Powers and M. R. Lewis. 40 pp.

  June 1941.

- June 1941.

  395. Reproductive performance in dairy cattle. I. R. Jones, R. W. Dougherty, and J. R. Haag. 27 pp. June 1941.

  396. Cost and efficiency in producing walnuts in western Oregon. G. W. Kuhlman and C. E. Schuster. 59 pp. June 1941.

  397. Reducing the loss of fat during churning. G. H. Wilster, R. P. Robichaux, R. E. Stout, and R. W. Stein. 35 pp. July 1941.

  398. Feeding for milk production I. R. Jones, and R. W. Morse. 47 pp. Oct. 1941.

  399. The farm freezing plant. W. H. Martin, F. E. Price. 19 pp. Nov. 1941.

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  401. Oregon's agricultural research aids national defense: Biennial report, 1938-1940. R. S. Besse. 95 pp. Dec. 1941.

  402. Studies of parasites in Oregon sheep on irrigated pastures. J. N. Shaw and O. H. Muth. 16 pp. Feb. 1942.

  403. Selective sprays for weed control in crops. L. E. Harris and G. R. Hyslop. 31 pp. Feb. 1942.

- 1942.

- 1942.

  404. Percolation and water requirement studies with alfalfa by means of lysimeters in Oregon. S. H. Hastings and H. K. Dean. 16 pp. Feb. 1942.

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  409. Cost of operating power equipment on Oregon farms. D. C. Mumford, V. D. Kennedy, and G. B. Davis. 32 pp. June 1942.

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- 411. Fowl-pox in domestic poultry. E. M. Dickinson. 30 pp. Aug. 1942.
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  413. The cause and control of defoliation in cut holly. J. A. Milbrath and H. Hartman.

- 11 pp. Nov. 1942.
  414. Butter making during hay feeding season, "50-45-40" method. G. H. Wilster, R. E. Stout, R. W. Stein, J. R. Haag, and I. R. Jones. 48 pp. Dec. 1942.
  415. Cost and efficiency in producing hairy vetch and Austrian winter field peas in western Oregon. G. W. Kuhlman and D. C. Mumford. 59 pp. Nov. 1942.

# PENNSYLVANIA AGRICULTURAL EXPERIMENT STATION, STATE COLLEGE

- 402. Trials of annual flowers, 1940. E. I. Wilde and J. R. Culbert. 38 pp. Feb. 1941.
   403. Experiments with buckwheat. J. W. White, F. J. Holben, and A. C. Richer. 62 pp. Mar. 1941.
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   408. The national F. F. A. contest as a measure of ability in judging. W. A. Broyles. 22 pp.
- Apr. 1941.
- Alfalfa-molasses silage as a roughage for fattening steers. P. T. Ziegler, F. L. Bentley, and R. C. Miller. 13 pp. Apr. 1941.

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   The Pennsylvania method for determining the percentage of fat in dairy products W. D. Swope. 18 pp. Mar. 1941.
   An economic study of land classes Blair County, Pennsylvania (progress report). W. E. Keepper. 26 pp. Apr. 1941.
   Science for the farmer: Fifty-fourth annual report for the fiscal year ended June 30, 1941.
   The minimum base value of heat production in animals: A research in the energy metabolism of cattle. E. B. Forbes and R. W. Swift. 26 pp. Nov. 1941.
   Electric brooding under winter conditions. E. W. Callenbach, J. E. Nicholas, and R. R. Murphy. 28 pp. Nov. 1941.
   Poorly-housed rural families of two Pennsylvania townships. M. E. John, D. S. Hiller, and D. L. Backenstose. 26 pp. Nov. 1941.
   Polyporaceae of Pennsylvania. III. The genus Poria. L. O. Overholts. 64 pp. Jan. 1942.
   Mushroom insects: Their biology and control. C. A. Thomas. 43 pp. Feb. 1942.
   Common insect larvae that attack the apple in Pennsylvania. S. W. Frost. 30 pp. Feb. 1942. 1942.
- Dairy farm management and costs in Pennsylvania. W. L. Barr. 34 pp. Feb. 1942.
   Bacterial leafspots of Pennsylvania tobacco. I. Occurrence and nature of the microorganism associated with wildfire. J. J. Reid, J. Naghski, M. A. Farrell, and D. E. Haley. 36
- associated with wildfire. J. J. Reid, J. Naghski, M. A. Farrell, and D. E. Haley. 36 pp. Mar. 1942.

  423. Field test of phosphate fertilizers C. F. Noll and C. J. Irvin. 14 pp. Mar. 1942.

  424. The relation of grain feeding to milk production. A. A. Borland, A. L. Beam, and P. D. Jones. 10 pp. Mar. 1942.

  425. Feeding systems for laying hens. E. W. Callenbach and R. R. Murphy. 26 pp. Mar. 1942.

- Trials of annual flowers. E. I. Wilde, C. B. Link, and J. R. Culbert. 52 pp. Mar. 1942.
   Methods of hastening absorption of salt in farm-cured ham. P. T. Ziegler and R. C. Miller. 8 pp. Apr. 1942.
   Digestion characteristics of various types of milk compared with human milk. F. J. Doan and J. L. Dizikes. 18 pp. Apr. 1942.
   Science for the farmer: Fifty-fifth annual report for the fiscal year ended June 30, 1942. S. W. Fletcher. 44 pp. Aug. 1942.
   The Penn. State Ballhead cabbage: Some problems encountered in its development. C. E. Myers. 52 pp. Aug. 1942.
   The orchard fertility problem during the war emergency. 12 pp. Aug. 1942.
   Blood plasma ascorbic acid tests in mass studies in human nutrition. J. M. Smith, M. L. Presper, and A. M. McCormick. 55 pp. Sept. 1942.
   Facilities and services of Pennsylvania freezer-locker plants. W. R. Whitacre. 13 pp. Nov. 1942.
   Experimental control of damping-off in tomato seedlings transplanted from sand, including

- 434. Experimental control of damping-off in tomato seedlings transplanted from sand, including the immediate application of fungicidal drenches. W. S. Beach and Shu Yi Chen (Shuk Yee Chan). 26 pp. Dec. 1942.
  435. Methods of forest growth determination. H. A. Meyer. 93 pp. Dec. 1942.
  436. Housing and attitudes toward housing in rural Pennsylvania. H. R. Cottam. 63 pp. Dec. 1942.
  437. Dec. 1942.

- Brook trout in Kettle Creek and tributaries. R. L. Watts, G. L. Trembley, and G. W. Harvey. 41 pp. Dec. 1942.

# PUERTO RICO AGRICULTURAL EXPERIMENT STATION, MAYAGUEZ

#### BULLETINS

- 40. The biology of Metagonistylum minense Tns., a parasite of the sugarcane borer. K. A.
- Harriett. 20 pp. Dec. 1941.

  41. A study of the adult populations of the West Indian fruitfly in citrus plantings in Puerto Rico. L. C. McAlister, Jr., W. A. McCubbin, G. A. Pfaffman W. T. Owrey H. G. Taylor, and I. W. Berryhill. 16 pp. Dec. 1941.

# PUERTO RICO UNIVERSITY AGRICULTURAL EXPERIMENT STATION, RIO PIEDRAS

- 57. Consumo de alimentos en la zona rural de Puerto Rico. S. Díaz Pacheco. 23 pp. Mar. 1941.
- El costo del mantenimiento de animales y su relacion con el uso de la tierra en la costa noroeste y la zona tabacalera. F. de Jesús. 34 pp. June 1941.
   Food consumption studies in Puerto Rico. S. L. Descartes, S. Díaz Pacheco, and J. R.

- Food consumption studies in Puerto Rico. S. L. Descartes, S. Díaz Pacheco, and J. R. Noguera. 76 pp. June 1941.
   Precio del tabaco en rama al agricultor en Puerto Rico del 1907 al 1940. J. J. Serrallés, Jr., y M. Velez, Jr. 42 pp. June 1941.
   The farm price of tobacco in Puerto Rico from 1907 to 1940. J. J. Serrallés, Jr. and M. Velez, Jr. 38 pp. June 1941.
   Costos e ingresos de algodon sea-island en la costa noroeste de Puerto Rico, 1939 y 1940. L. M. Géigel. 41 pp. Jan. 1942.
   Distribución de legumbres y hortalizas en las cuidades de Rio Piedras y San Juan. I. Organización del sistema de mercadeo y costos de distribución. II. Costos de explotación de camiones en la distribución de legumbres y hortalizas. S. Días Pacheco y J. R. Noguera. 40 pp. Nov. 1942.
   Estudio de 96 granjas de la P. R. R. A. establecidas en Cayey, Cidra y Aibonito. D. Haddock. 28 pp. June 1942.

#### RESEARCH BULLETINS

- Chemical data of Puerto Rico soils: Correlation of data for humid and arid areas. Field response of crops to available phosphorus and potash in soils. J. A. Bonnet. 53 pp.

response or crops to available phospholus and polasi in solid Apr. 1941.

2. The life history of Oesophagostomum radiatum, the common nodular worm of cattle. J. S. Andrews and J. F. Maldonado. 14 pp. May 1941.

3. A physiological study on the effects of waxing pineapples of different stages of maturity. N. A. Schappelle. 32 pp. May 1941.

# RHODE ISLAND AGRICULTURAL EXPERIMENT STATION, KINGSTON

# BULLETINS

- 277. A study of soil erosion in the agricultural areas of Rhode Island and the comparative erodibility of five major soil series associated with these areas. E. A. Perry. 25 pp. June 1941.
- 278. Pathogenicity and control of Corticium fuciforme. L. E. Erwin. 34 pp. June 1941.
  279. The economic relationship between feeding and milk production in Rhode Island. J. L.
  Tennant and H. C. Fowler. 23 pp. June 1941.
  280. Field experiments with potash fertilizers. T. E. Odland and T. R. Cox. 30 pp. June 1941.
  281. Field experiments with phosphate fertilizers. T. E. Odland and T. R. Cox. 27 pp. Feb.
- 1942. Satellite acres: A study of 1,100 households in rural Rhode Island with income from combinations of non-agricultural employment and agricultural production. W. R. Gordon. 80 pp. Mar. 1942.
   Influence of spacing on yield and grade of strawberries. E. P. Christopher. 15 pp. Nov.
- 1941.
- The modification of infectious bronchitis virus of chickens as the result of propagation in embryonated chicken eggs. J. P. Delaplane and H. O. Stuart. 20 pp. Nov. 1941.
   Land, people, and farming in a rurban zone. W. R. Gordon and G. S. Meldrum. 48 pp. Nov. 1942.
- Vitamin A metabolism and requirements as determined by the rhodometer. E. L. Batchelder and J. C. Ebbs. 24 pp. Sept. 1942.
   Production and marketing of potatoes in Rhode Island. J. L. Tennant and A. Joss. 47 pp. Nov. 1942.

# SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION, CLEMSON

# BULLETINS

- 332. An economic study of agriculture in the Little Beaverdam Creek area, Anderson County, South Carolina. M. J. Peterson. 54 pp. Mar. 1941.
  333. Stability of carotene in dehydrated sweet potatoes. J. H. Mitchell and E. J. Lease. 8 pp. June 1941.
  344. The sole price and accordant to the formula of the sole price and accordant to the sole price and accor
- 334. The sale price and assessed value of farm real estate in South Carolina. G. H. Aull.
  42 pp. June 1941.
  335. Cotton marketing in South Carolina. W. T. Ferrier and H. A. White. 28 pp. Oct. 1941.
  336. Inspection and analysis of commercial fertilizers. B. D. Cloaninger. 177 pp. Nov. 1941.
  337. The nature and extent of farm tax delinquency in South Carolina. G. H. Aull. 31 pp.
- Dec. 1941. 330. rarm management in Newberry County, South Carolina. M. J. Peterson and J. D. Kinard. 31 pp. Jan. 1942.
  339. Attitudes of Edgefield County farmers toward farm practices and rural programs. M. T. Matthews, D. R. Jenkins, and R. F. Sletto. 39 pp. Feb. 1942.
  340. A farm business study of the six mile area of Pickens County, South Carolina, 1940. J. D. Kinard and M. J. Peterson. 30 pp. Feb. 1942.
  341. Textile materials used for household purposes by farm families. M. E. Frayser. 15 pp. May 1942.
  342. An economic study of conversat for the programs of the control of the programs of the programs of the programs.

- May 1942.

  342. An economic study of commercial fruit and vegetable canneries in South Carolina. J. M. Stepp. 54 pp. Sept. 1942.

  343. Food habits of South Carolina farm families. A. M. Moser. 38 pp. Nov. 1942.

  344. Some factors affecting the quality of ginning services in South Carolina. J. M. Stepp and H. A. White. 15 pp. Sept. 1942.

  345. Inspection and analysis of commercial fertilizers. H. J. Webb. 154 pp. Dec. 1942.

# SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION, BROOKINGS

#### BULLETINS

- Basic trends of social change in South Dakota. VII. Local government. W. F. Kumlien. 31 pp. Feb. 1941.
   Basic trends of social change in South Dakota. VIII. Religious organization. W. F. Kumlien. 24 pp. May 1941.
   Homemade rubber tired wagons and trailers. H. H. DeLong. 31 pp. Apr. 1941.
   Holding cream for buttermaking. D. H. Jacobsen and T. A. Evans. 12 pp. June 1941.
   Farmer's elevator operations in South Dakota. L. M. Brown and H. Hedges. 39 pp. June 1941.

June 1941.

- 352. Profits and losses in ranching, western South Dakota, 1931-1940. A. G. Nelson and G. E. Korzan. 31 pp. June 1941.
  353. Feeding values of low- and high-test weight grains for chickens. W. E. Poley and W. O. Wilson. 32 pp. June 1941.
- 354. Fattening western lambs and gummer ewes. J. C. Watson and F. U. Fenn. 10 pp. June 1941.
- 355. Assessment procedure and problems in South Dakota. N. J. Anderson. 25 pp. Aug. 1941.
  356. Basic trends of social change in South Dakota. III. Community organization. W. F. Kumilen. 20 pp. Dec. 1941.
  357. Basic trends of social change in South Dakota. II. Rural life adjustments. W. F. Kumlen. 24 pp. Dec. 1941.
  358. The effect of fineness of grinding grain on milk production. T. M. Olson. 8 pp. Feb.
- 1942.
- Migrants from rural South Dakota families, their geographical and occupational distribution. W. L. Slocum. 20 pp. Apr. 1942.
   Frozen food locker plants in South Dakota. W. P. Cotton and F. U. Fenn. 28 pp. May
- W. P. Cotton and F. U. Fenn. 28 pp. May 1942.
- 361. Regrassing areas in South Dakota C. J. Franzke and A. N. Hume. 48 pp. June 1942. 362. Livestock marketing practices in South Dakota. W. P. Cotton. 79 pp. June 1942. 363. Cooperative creameries in South Dakota. W. P. Cotton, G. Lundy, and L. M. Brown.
- 31 pp. July 1942.
- 364. Egg and poultry marketing in South Dakota. W. P. Cotton and W. O. Wilson. 24 pp. Nov. 1942.
- 365. Marketing livestock in the Corn Belt region. Corn Belt Livestock Marketing Research Committee. 198 pp. Nov. 1942.
   366. Barley, various weights for fattening pigs. T. Wright. 7 pp. Nov. 1942.

# TENNESSEE AGRICULTURAL EXPERIMENT STATION, KNOXVILLE

# BULLETINS

- 173. The frozen food industry. H. Carlton. 175 pp. Jan. 1941.
  174. The tomato fruit worm in Tennessee. S. Marcovitch and W. W. Stanley. 18 pp. Jan. 1941.
- 175. Cottonseed treatments in Tennessee. N. I. Hancock and D. M. Simpson. 15 pp. Mar. 1941.
- 176. A new explanation of what happens to superphosphate in limed soils. W. H. MacIntire.
- A new explanation of what happens to superphosphate in limed soils. W. H. MacIntire. 16 pp. Apr. 1941.
   Farmers' marketing and purchasing associations in Tennessee. B. D. Raskopf and P. W. Voltz. 60 pp. Sept. 1941.
   Comparison of shock corn, crib corn, and corn silage on an acre basis for finishing two-year-old cattle. M. Jacob and H. R. Duncan. 23 pp. Apr. 1942.
   A new castor-bean sheller. H. A. Arnold and M. A. Sharp. 12 pp. May 1942.
   Growth of Barred Rock chickens. J. E. Parker and B. J. McSpadden. 8 pp. May 1942.
   Fluorine compounds useful in the control of insects. S. Marcovitch and W. W. Stanley.

- 47 pp. Dec. 1942.

# TEXAS AGRICULTURAL EXPERIMENT STATION. COLLEGE STATION

- 596. Onion fertilizer experiments at Laredo, Big Wells, and Eagle Pass, Texas. L. R. Hawthorn. 29 pp. Jan. 1941.
  597. Land use in relation to sedimentation in reservoirs, Trinity River Basin, Texas. A. N. Garin and L. P. Gabbard. 65 pp. Jan. 1941.
  598. Infectious entero-toxemia (milk colic) of lambs and kids. I. B. Boughton and W. T. Hardy. 20 pp. Mar. 1941.
  599. The use of Sudan grass pastures and other feeds for beef production. J. H. Jones, J. M. Jones, R. A. Hall, and E. M. Neal. 29 pp. Mar. 1941.
  600. Productive energy of corn meal, alfalfa leaf meal, dried buttermilk, casein, cottonseed meal, and tankage as measured by production of fat and flesh by growing chickens. G. S. Fraps and E. C. Carlyle. 41 pp. Apr. 1941.
  601. Citrus varieties for the lower Rio Grande Valley. W. H. Friend and J. F. Wood. 36 pp. May 1941.
- May 1941.

- May 1941.

  602. Fertilizer for rice in Texas. R. H. Wyche. 18 pp. June 1941.

  603. Budgeting in Texas counties, 1931-1940. H. C. Bradshaw. 33 pp. Sept. 1941.

  604. Utilization of home grown feeds in fattening steers in the Trans-Pecos region. J. H. Jones, J. M. Jones, and J. J. Bayles. 51 pp. Sept. 1941.

  605. Barley production in Texas. I. M. Atkins and P. B. Dunkle. 35 pp. Sept. 1941.

  606. Cost and profit of ginning cotton in Texas. W. E. Paulson. 103 pp. Jan. 1942.

  607. Commercial feetilizers in 1940-41. G. S. Fraps, T. L. Ogier, and S. E. Asbury. 47 pp. Sept. 1941.

  608. Commercial feeding stuffs, from September 1, 1940 to August 31, 1941. F. D. Fuller and J. Sullivan. 260 pp. Sept. 1941.

  609. Plants of ornamental value for the Rio Grande Valley of Texas W. H. Friend. 156 pp. Mar. 1942.

  610. Vegetable adaptability in the Wichita Valley. B. S. Pickett and L. E. Brooks. 36 pp. Jan. 1942.

  611. Fern (Notholagua sinuata, var. Crenata) poisoning in sheep, goats, and cattle—the so-called

- Jan. 1942.
  611. Fern (Notholagna sinuata, var. Crenata) poisoning in sheep, goats, and cattle—the so-called "jimmies" of the Trans-Pecos. F. P. Mathews. 15 pp. Apr. 1942.
  612. Propagation of a rapid growing semi-evergreen hybrid oak. W. S. Flory, Jr., and F. R. Brison. 32 pp. May 1942.

613. Dried citrus pulp in beef cattle fattening rations. J. M. Jones, R. A. Hall, E. M. Neal and J. H. Jones. 20 pp. July 1942.
614. Cotton root rot studies with special reference to sclerotia, cover crops, rotations, tillage, seeding rates, soil fungicides, and effects on seed quality C H. Rogers. 45 pp. June 1942

1942.
615. Adaptability studies with bearded iris in Texas. S. H. Yarnell. 33 pp. Aug. 1942.
616. Germination of cottonseed as affected by soil disturbance and machine placement of fertilizer.
H. P. Smith M. H. Byrom, and H. F. Morris. 29 pp. Aug. 1942.
617. Information basic to farm adjustments in the Rolling Plains area of Texas. P. H. Czarowitz and C. A. Bonnen. 108 pp. Sept. 1942.
618. State and local financial relations in Texas. H. C. Bradshaw. 26 pp. Sept. 1942.
619. Commercial fertilizers in 1941-42. G. S. Fraps, T. L. Ogier, and S. E. Asbury. 45 pp. Sept. 1942.

Sept. 1942.

Sept. 1942.
620. Commercial feeding stuffs from September 1, 1941 to August 31, 1942. F. D. Fuller and F. D. Brock. 256 pp. Sept. 1942.
621. Effects of planter attachments and seed treatment on stands of cotton. H. P. Smith and M. H. Byrom. 16 pp. Oct. 1942.
622. Silage and cottonseed meal for fattening yearling steers. J. H. Jones, R. E. Dickson, J. K. Riggs, and J. M. Jones. 22 pp. Oct. 1942.
623. Control of eggplant yellows. S. E. Jones. 17 pp. Nov 1942.
624. Gearing Texas cotton to war needs. C. A. Bonnen, D. T. Killough, G. W. Pfeiffenberger, W. E. Paulson, M. C. Jaynes, and L. P. Gabbard. 24 pp. Nov. 1942.
625. Productive energy of some feeds and foods as measured by gains of energy by growing chickens. G. S. Fraps and E. C. Carlyle. 51 pp. Dec. 1942.

# UTAH AGRICULTURAL EXPERIMENT STATION, LOGAN

#### BULLETINS

Comparison of two methods of determining wool density. M. A. Madsen, R. W. Phillips, J. V. Christensen, and R. L. Henrie. 16 pp. Jan. 1941.
 Uton, a new high-yielding white oat resistant to loose and covered smuts. D. C. Tingey, R. W. Woodward, and T. R. Stanton. 15 pp. Apr. 1941.
 The pale western cutworm (Agrotis orthogonia Morrison) in Utah. C. J. Sorenson and H. F. Thornley. 23 pp. June 1941.
 Wool scouring tests in Utah. A. C. Esplin, R. W. Phillips, and M. A. Madsen. 24 pp. June 1941.

Wool scouring tests in Utah. A. C. Esplin, R. W. Phillips, and M. A. Madsen. 24 pp. June 1941.
 Control of chlorosis in American grapes. F. B. Wann. 27 pp. June 1941.
 A study of farm organization by type of farm in Sanpete and Sevier Counties. W. P. Thomas, G. T. Blanch, and E. Hayball. 75 pp. Nov. 1941.
 Economic analysis of the Weber Central Dairy Association. W. U. Fuhriman, H. H. Culter, W. P. Thomas. 42 pp. May 1942.
 Nutritional inadequacy of beet molasses rations for swine. R. A. Rasmussen, H. H. Smith, R. W. Phillips, and T. J. Cunha. 22 pp. July 1942.
 Utilization of irrigable land in the Reservation area of Uinta Basin, Utah. G. T. Blanch and C. E. Stewart. 53 pp. Mar. 1943.
 Phosphate reserves of Utah, revised estimate. J. S. Williams and A. M. Hanson. 24 pp. Oct. 1942. Supplement to Bulletin 290.
 The composition of summer range plants in Utah. L. A. Stoddart and J. E. Greaves. 22 pp. Dec. 1942.

# VERMONT AGRICULTURAL EXPERIMENT STATION, BURLINGTON

# BULLETINS

470. Housing of 538 Vermont farm families. V. Britton. 39 pp. Mar. 1941.
471. Blossom position in pear clusters and set of fruit. E. W. Jenkins. 24 pp. June 1941.
472. Competition influence on the root systems of jack and Norway pines. W. R. Adams and G. L. Chapman. 32 pp. Apr. 1941.
473. Commercial feeding stuffs: The role of minerals in stock feeding. L. S. Walker and E. F. Boyce. 63 pp. June 1941.
474. Food consumption of 538 farm and 299 village families in Vermont. V. Britton. 46 pp. June 1941.

June 1941.

475. Fifty-fourth annual report, 1940-41. J. L. Hills. 40 pp. Aug. 1941.
476. Commercial fertilizers, concerning fertilizer usage. L. S. Walker and E. F. Boyce. 30 pp. Sept. 1941.

Sept. 1941.

477. Agricultural seed. A. S. Lutman. 16 pp. Oct. 1941.

478. Commercial feeding stuffs. L. S. Walker and E. F. Boyce. 64 pp. Dec. 1941.

479. Studies in Vermont dairy farming. XII. Dairy farm management in the Champlain Valley and its relation to the price level. S. W. Williams. 276 pp. June 1941.

480. Elasticity of supply of milk from Vermont plants. III. Forecasting the milk supply. S. M. Johnson. 116 pp. Mar. 1942.

481. Relation of ascorbic acid and of oxygen to oxidized flavor in milk J. G. Leeder and E. O. Herreid. 12 pp. Jan. 1942.

482. Feeding values of silages and hays: Grass and corn silages for cows, sun-cured and artificially dried hays, grass and corn silages for heifers, hay and grass silage for heifers. O. M. Camburn, H. B. Ellenberger, and C. H. Jones. 12 pp. Mar. 1942.

483. Erosion on Vermont permanent pastures. A. R. Midgley, C. V. Plath, and J. J. Mayernik.

15 pp. Mar. 1942.

484. Grassland maintenance in Vermont. I. A preliminary study. D. E. Dunklee and A. R. Midgley. 14 pp. Apr. 1942.

485. The conservation of nutrients in grass silage. IV. J. A. Newlander. H. B. Ellenberger and C. H. Jones. 11 pp. Apr. 1942.

486. Bottled milk deliveries. H. B. Ellenberger. 12 pp. Apr. 1942.

487. Commercial feeding stuffs. L. S. Walker and E. F. Boyce. 43 pp. May 1942.

- 488. Some effects of nitrogen on young apple trees. B. F. Lutman. 35 pp. June 1942. 489. Competition in some coniferous plantations. W. R. Adams and G. L. Chapman. 26 pp. June 1942.
- 490. Farm families of two Vermont counties, their incomes and expenditures. M. Muse. June 1942.
- 491. Reducing truck mileage in retail milk delivery. J. A. Hitchcock. 12 pp. June 1942, 492. Eccentric growth in the main stem of young white ash trees. G. P. Burns. 19 pp. June
- 493. Interrelation of pollination, position on cluster and set of pears. E. W. Jenkins.
- June 1942.

- June 1942.

  494. The conservation of alfalfa, red clover, and timothy nutrients as silages and as hays. II.

  O. M. Camburn, N. B. Ellenberger, C. H. Jones, and G. C. Crooks. 40 pp. June 1942.

  495. Fifty-fifth annual report 1941-1942. J. L. Hills. 37 pp. Sept. 1942.

  496. Commercial fertilizers, concerning nitrogen supplies in war time. L. S. Walker and E. F.

  Boyce. 27 pp. Oct. 1942.

  97. Agricultural seed. A. S. Lutman. 15 pp. Oct. 1942.

  498. Dye reduction in milk related to Eh, pH and dissolved gases. J. M. Frayer. 34 pp.

  Sept. 1942.

  499. Studies in tolerance of New England forest trees. XIV. Effect of spacing on the efficiency
  of white and red pine needles as measured by the amount of wood production on the
  main stem. G. P. Burns and E. S. Irwin. 28 pp. Sept. 1742.

# VIRGINIA AGRICULTURAL EXPERIMENT STATION, BLACKSBURG

#### BULLETINS

- J29. Experiments on flue-cured tobacco. E. M. Matthews and T. B. Hutcheson. 30 pp. Jan. 1941.
- 330. Lime and fertilizers improve pastures. W. R. Perkins, A. L. Grizzard, and T. B. Hutche-
- Lime and fertilizers improve pastures. W. R. Perkins, A. L. Grizzard, and T. B. Hutcheson. 32 pp. Jan. 1941.
   Farmer cooperation in southwest Virginia, a physical inventory and appraisal of cooperative endeavor in fitteen counties. E. L. Morgan and T. N. Gearreald. 46 pp. Mar. 1941.
   Control of grape diseases and insects. R. H. Hurt. 12 pp. Apr. 1941.
   Experiments and observations on pasture management in Appomattox County. T. B. Hutcheson. 32 pp. Apr. 1941.
   Experiments on the culture of hybrid tea roses. A. G. Smith, Jr. 32 pp. May 1941.
   Virginia's marginal population: A study in rural poverty. W. E. Garnett and A. D. Edwards. 166 pp. July 1941.
   Effects of boron on yield and duration of alfalfa. T. B. Hutcheson and R. P. Cocke. 9 pp. Aug. 1941.

- Effects of boron on yield and duration of alfalfa. T. B. Hutcheson and R. P. Cocke. 9 pp. Aug. 1941.
   The application of commercial nitrogenous fertilizers to Berks silt loam soil is profitable. P. T. Gish. 12 pp. Mar. 1942.
   Panut leafspot and leafhopper control. L. I. Miller. 23 pp. May 1942.
   Rotation and fertilizer experiments in southwest Virginia. W. R. Perkins, A. L. Grizzard, and T. B. Hutcheson. 15 pp. May 1942.
   Beaverdam: A rural community in transition. A. D. Edwards. 64 pp. May 1942.
   Why some farmers are more successful than others. J. J. Vernon. 19 pp. July 1942.
   Supplementary control measures for codiling moth. A. M. Woodside. 19 pp. Aug. 1942.
   The sheep parasite problem inAugustaCounty. W. L. Threlkeld. 12 pp. Nov. 1942.
   Control of field mice in apple orchards. A. M. Woodside, R. N. Jefferson, R. C. Moore, and E. H. Glass. 16 pp. Nov. 1942.
   Soybean production. T. B. Hutcheson. 14 pp. Dec 1942.

# TECHNICAL BULLETINS

- Helminth parasites in sheep. W. L. Threlkeld. 46 pp. Feb. 1941.
   Factors which affect the vitamin C content of apples. M. S. Eheart. 16 pp. Mar. 1941.
- Factors which affect the vitamin C content of apples. M. S. Eheart. 16 pp. Mar. 1941.
   Susceptibility of wheat varieties and selections to loose smut. S. A. Wingard and F. D. Fromme. 26 pp. May 1941.
   An economic study of the organization and management of beef cattle and other types of farms in Russell County. J. J. Vernon. 186 pp. July 1941.
   Effects of slope, character of soil. rainfall, and cropping treatments on erosion losses from Dunmore silt loam. J. H. Lillard, H. T. Rogers, and J. Elson. 32 pp. Aug. 1941.
   The effect of green-manure crops on certain properties of Berks silt loam. S. S. Obenshain and P. T. Gish. 12 pp. Sept. 1941.
   Factors affecting physiological breakdown of maturing tobacco. G. M. Shear. 16 pp. Oct. 1941.

- 75. The effect of certain nitrogenous fertilizers on the chemical and vegetative composition and yield of pasture plants. J. F. Eheart and W. B. Ellett. 44 pp. Nov. 1941.
   76. Fowl leukosis—manifestations, transmission, and etiological relationship of various forms. E. P. Johnson. 21 pp. Dec. 1941.
   77. Surface run-off and erosion from permanent pastures in southwest Virginia as influenced by applications of triple superphosphate. W. H. Dickerson, Jr., and H. T. Rogers. 26 pp. Dec. 1941.

- 78. Pasture production as affected by type and chemical composition of the soil. N. O. Price, W. B. Ellett, and H. H. Hill. 14 pp. Dec. 1941.
   79. Parasites of the oriental fruit moth and of certain weed-infesting larvae. M. L. Bobb. 23 pp. May 1942.
   80. The effect of different phosphatic fertilizers on the yield, plant population, and chemical composition of pasture herbage on Dunmore and Emory soils. R. E. O'Brien and S. S. Obenshain. 37 pp. Aug. 1942.
   81. The directibility and willigation by dairy cover of putrients from fertilized and unfartilized.
- The digestibility and utilization by dairy cows of nutrients from fertilized and unfertilized blue-grass pasture. J. F. Eheart and A. D. Pratt. 28 pp. Aug. 1942.
   The elemental sulfur fungicides. A. B Groves 61 pp. Nov. 1942.

# VIRGINIA TRUCK STATION, NORFOLK

#### BULLETIN

- 106. Rapid soil tests for determining the fertilizer requirements of vegetable crops in eastern Virginia. E. R. Purvis and J. M. Blume. Pp. 1743-1756. Jan. 1941.
  107. Effect of fertilizer placement on snap beans, lima beans and peas. M. M. Parker. Pp. 1759-1781. Apr. 1942.
  108. Potato scab in relation to calcium. soil reaction and the use of acid-forming and non-acid-forming fertilizers. H. T. Cook and T. J. Nugent. Pp. 1783-1795. July 1942.
  109. Chemicals effective for sweet potato "seed" treatment. H. T. Cook and L. L. Harter. Pp. 1773-1807. Oct 1942. 1797-1807. Oct. 1942.

# WASHINGTON AGRICULTURAL EXPERIMENT STATION, PULLMAN

- 395. Utilization of barnyard manure for Washington soils. L. E. Dunn and L. C. Wheeting. 20 pp. Feb. 1941.
- Boron deficiency of alfalfa in western Washington. K. Baur, G. A. Huber, and L. C. Wheeting. 16 pp. Feb. 1941.
- 397. The adjustment of new settlers in the Yakima Valley, Washington. C. F. Reuss and L. H. Fisher. 48 pp. Feb. 1941.

  398. Wheat varieties in Washington in 1939. E. F. Gaines and E. G. Schafer. 22 pp. Apr.
- 1941.
- 399. Settlement experience and opportunities on cut-over lands of western Washington. C. P. Heisig. 56 pp. Apr. 1941. 400. (Series in Rural Social Institutions, No. 3.) County government in Washington. C. F.
- Reuss. 62 pp. May 1941. 401. Washington apples on the New York and Chicago fruit auctions. M. T. Buchanan. 55 pp.
- June 1941. 402. Concentrate feeding of turkeys. E. I. Robertson and J. S. Carver. 16 pp. July 1941.
- 403. A comparison of wet and dry cooling of dressed poultry. J. Roberts and E. I. Robertson. 15 pp. Aug. 1941.

- 15 pp. Aug. 1941.
   404. The all-electric greenhouse. J. Roberts and S. E. Wadsworth. 22 pp. Sept. 1941.
   405. The carrot rust fly. A. J. Hanson and R. L. Webster. 24 pp. Sept. 1941.
   406. The marketing of Washington apples in Los Angeles, California. I. Transportation and wholesale distribution. M. T. Buchanan and E. F. Dummeier. 51 pp. Sept. 1941.
   407. (Series in Rural Population, No 7.) After three years: A restudy of the social and economic adjustment of a group of drought migrants. P. H. Landis. 36 pp. Oct. 1941.
   408. Ascorbic acid (vitamin C) content of garden-type peas preserved by the frozen-pack method. E. N. Todhunter and R. C. Robbins. 28 pp. Nov. 1941.
   409. Economic conditions and problems of agriculture in the Yakima Valley, Washington. III. Fruit farming. E. B. Hurd, C. P. Heisig, M. Clawson, H. F. Hollands, and B. H. Pubols. 97 pp. Oct. 1941.
   410. Fifty-first annual report for the fiscal year ended June 30, 1941. E. C. Johnson, and

- They are annual report for the fiscal year ended June 30, 1941. E. C. Johnson, and others. 142 pp. Dec. 1941.
   (Technical paper.) Measuring the yield of nutrients of experimental pastures. R. E. Hodgson, J. C. Knott, V. L. Miller, and F. B. Wolberg. 31 pp. Apr. 1942.
   The value of liquid manure as a fertilizer for pasture R. E. Hodgson, J. C. Knott, V. L. Miller, H. K. Murer, U. S. Ashworth, F. B. Wolberg, and K. Baur. 28 pp. Apr. 1942.
   Rations for ewes in lambing camp. H. Hackedorn, H. P. Singleton, and W. H. Burkitt. 22 pp. Mar. 1942.
   Economic conditions and matter.

- 22 pp. Mar. 1942.
   Economic conditions and problems of agriculture in the Yakima Valley, Washington. IV. Hop farming. H. F. Hollands, E. B. Hurd, and B. H. Pubols. 39 pp. July 1942.
   The marketing of Washington apples in Los Angeles, California. II. Retail distribution. M. T. Buchanan and E. F. Dummeier. 68 pp. July 1942.
   (Technical paper.) The value of dogfish meal as a protein supplement. M. Rhian, J. S. Carver, R. W. Harrison, and W. S. Hamm. 24 pp. July 1942.
   (Technical paper.) Tartar emetic for thrips control on greenhouse carnations. R. D. Eichmann. 35 pp. Aug. 1942.
   The protein value of Alaska pea meal for chickens. J. S. Carver, B. B. Bohren, and J. W. Cook. 16 pp. Aug. 1942.
   (Series in Rural Population, No. 8.) Fifty years of population growth in Washington: A study of the trends in numbers, composition, vital traits, and migration of Washington population. P. H. Landis. 47 pp. Sept. 1942.
   (Youth Series, No. 1.) Six months after commencement: An analysis of the occupational roles of 133,651 graduates from Washington high schools, classes of 1934 through 1941. P. H. Landis. 31 pp. Sept. 1942.
   Soil management for roses in the greenhouse. L. C. Wheeting. 20 pp. Oct. 1942.

- P. H. Landis. 31 pp. Sept. 1942.
   Soil management for roses in the greenhouse. L. C. Wheeting. 20 pp. Oct. 1942.
   (Technical paper.) The relation of ultra-violet light and temperature during aging to qualify of beef. I. J. A. McIntosh, J. Sotola, M. Boggs, J. Roberts, C. C. Prouty, and M. E. Ensminger. 26 pp. Oct. 1942.
   The marketing of Washington apples in Los Angeles, California. III. Consumer use and preference. M. T. Buchanan. 32 pp. Oct. 1942.
   Farming systems in King and Snohomish Counties, Washington, 1939. W. W. Rufener, O. H. Maughan, B. H. Pubols, E. W. Carlsen, and L. C. Wheeting. 86 pp. Oct. 1942.
   Fifty-second annual report for the fiscal year ended June 30, 1942. E. C. Johnson. 121 pp. Dec. 1942.
- Dec. 1942.
- (Series in Rural Population, No. 9.) Back to the country—the rurban trend in Washington's population. C. F. Reuss. 33 pp. Dec. 1942.

#### POPULAR BULLETINS

- 160. Electric pig and lamb brooders. W. A. Junnila and H. G. McDonald. 8 pp. Jan. 1941.
  161. Locker freezing of fruits and vegetables. E. L. Overholser, J. A. Berry, H. C. Diehl, M. Boggs, and E. N. Todhunter. 34 pp. Aug. 1941.
  162. Peach growing in Washington. E. L. Overholser, A. L. Kenworthy, and R. M. Bullock. 32 pp. Aug. 1941.
  163. What the farm should contribute toward family living. A. E. Orr, and others. 43 pp. Care 1041.
- Sept. 1941. 164. Insects of the blackberry, raspberry, strawberry, currant, and gooseberry. A. J. Hanson and R. L. Webster. 40 pp. Oct. 1941. Revision of 155.
  165. The farmer's fertilizer handbook. L. C. Wheeting, E. L. Overholser, and S. C. Vandecaveye. 15 pp. Jan. 1942.
  166. Fiber flax in western Washington. E. G. Schafer. 11 pp. Mar. 1942.

# WEST VIRGINIA AGRICULTURAL EXPERIMENT STATION, MORGANTOWN

#### BULLETINS

- 299. Proceedings of the 1940 conference on low-income farms. C. R. Orton, and others. 46 pp. Mar. 1941.
   300. Practical forest management for the cut-over hardwood lands in southern West Virginia. L. Besley. 15, xlvi pp. Apr. 1941.
   301. Farm management for soil conservation in the Harrison area. E. C. Weitzell. 51 pp. May
- 1941. 302. Farmers' mutual fire insurance companies in West Virginia. M. A. Abrahamsen. 43 pp. Oct. 1941.
- 303. Some physical and chemical properties of the principal orchard soils in the eastern Panhandle of West Virginia. G. M. Browning and R. H. Sudds. 56 pp. Mar. 1942.
  304. Farming adjustments and agricultural conservation programs in West Virginia. F. D. Cornell, Jr., and C. W. Crickman. 40 pp. Apr. 1942.
  305. Economics of soil conservation in West Virginia. E. C. Weitzell. 59 pp. Aug. 1942.

# WISCONSIN AGRICULTURAL EXPERIMENT STATION, MADISON

# BULLETINS

- 451. What's new in farm science: Fifty-seventh annual report for year ended June 30, 1940, Part
  II. C. L. Christensen, N. Clark, and N. Hoveland. 112 pp. Apr. 1941.
  452. Cropping systems that help control erosion. O. E. Hays and N. Clark. 23 pp. June 1941.
  453. What's new in farm science: Fifty-eighth annual report for the year ended June 30, 1941, Part I. C. L. Christensen, N. Clark, and N. Hoveland. 88 pp. Dec. 1941.
  454. Feeding and management of market hogs. J. M. Fargo, G. Bohstedt, and J. J. Lacey. 22 pp. Dec. 1941.
  455. What's new in farm science: Fifty-eighth annual report for year ended June 30, 1941, Part II. C. L. Christensen, N. Clark, and N. Hoveland. 87 pp. 1942.
  456. What's new in farm science: Fifty-ninth annual report for the science of the part of of the

# RESEARCH BULLETINS

- State aids and rural property taxes in Wisconsin. K. H. Parsons, B. H. Hibbard, and A. J. Walrath. 48 pp. Mar. 1941.
   Man in the "cut-over": A study of family-farm resources in northern Wisconsin. G. W. Hill and R. A. Smith. 72 pp. Apr. 1941.
   Experiments on the burn of cigars. J. Johnson. 25 pp. Aug. 1941.
   A ten year fertilizer experiment on tobacco. J. Johnson and W. B. Ogden. 25 pp. Dec.
- 1941.
- 142. A survey of tobacco soils in Wisconsin. J. Johnson and W. B. Ogden. 23 pp. Jan. 1942.
  143. Paying producers for fat and solids-not-fat in milk. R. K. Froker and C. M. Hardin. 48 pp. Feb. 1942. Revised December 1942.
  144. Wisconsin canning pea trials, 1937-1941. E. J. Delwiche. 36 pp. May 1942.

# WYOMING AGRICULTURAL EXPERIMENT STATION, LARAMIE

- 243. Practical results from the State experiment farms. W. L. Quayle. 43 pp. Jan. 194
  244. Bacterial ring-rot of potatoes. G. H. Starr and W. A. Riedl. 12 pp. Feb. 1941.
  245. Sulphur dusting for the control of psyllid yellows of potatoes. W. A. Riedl. 16 pp. pp. Jan. 1941. Feb. 1941.
- 1941. 246. Hybrid corn adaptation trials in Wyoming, 1940. W. A. Riedl and W. L. Quayle. 20 pp. Apr. 1941.
- 247. Bean straw in the ration for fattening lambs in the Big Horn Basin. A. S. Ingraham. 12 pp. Apr. 1941.
  248. Influence of cereal grains upon quality of meat in turkeys. M. O. North. 20 pp. May
- 1941. 249. Coccidia infesting the Rocky Mountain bighorn sheep in Wyoming. R. F. Honess. 28 pp. Feb. 1942.

#### 32 BIBLIOGRAPHICAL BULLETIN 4, U.S. DEPT. OF AGRICULTURE

250. Vegetable culture and varieties for Wyoming. M. F. Babb and W. L. Quayle. 40 pp.

Apr. 1942.

251. Hybrid corn in Wyoming, 1941. W. A. Riedl and W. L. Quayle. 23 pp. Apr. 1942.

252. The control of chlorosis in cottonwood trees and other plants. G. H. Starr. 16 pp. May

253. Range forage production in relation to time and frequency of harvesting. R. Lang and O. K. Barnes. 32 pp. June 1942.
254. Crossbreeding for lamb and wool production. J. A. Gorman, F. S. Hultz, R. L. Hiner, O. G. Hankins, and D. A. Spencer. 48 pp. June 1942.
255. Lungworms of domestic sheep and bighorn sheep in Wyoming. R. F. Honess. 24 pp. Aug.

1942.

The use of wheat in livestock feeding. W. L. Quayle. 11 pp. Oct. 1942.
 Utilizing self-feeding methods for fattening lambs on sugar beet by-products and other homegrown feeds. A. S. Ingraham. 28 pp. Oct. 1942.

#### INDEX BULLETIN

I. List of publications . . . [1891—April 1941]; index to Bulletins 218-247, inclusive, Annual reports 46-50 [July 1935 to June 1940], inclusive. M. Lamb. 47 pp. July 1941.

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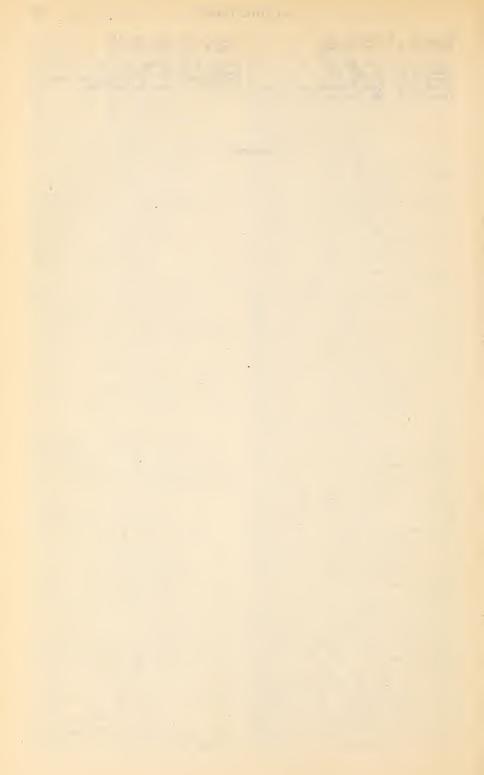
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